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# Canadian Journal of Psychology

# SOME OBSERVATIONS ON THE VALIDATION OF PSYCHOLOGICAL KNOWLEDGE<sup>1</sup>

S. N. F. CHANT University of British Columbia

As I reach this final duty of my term of office, I wonder, as several of my predecessors have done, just why we continue having presidential addresses. It is doubtless a practice of considerable antiquity and it has now become so much a part of the tradition of scientific and learned societies that it would be scarcely fitting to suggest that we substitute for it some more exhilarating form of entertainment.

It is very unlikely that any psychological association will readily abandon the practice, because psychologists would not wish to appear frivolous in the eyes of other scientific bodies. Whatever scientific status psychology enjoys has been attained by considerable effort, and we would not willingly condone any action designed to disparage practices that are cherished by those societies that represent the more firmly established sciences. It is but a few short decades ago that psychologists were vigorously pressing the demand that psychology be recognized as a science. The improved objectivity of psychological observation and the increased interest in psychological experimentation were put forth in support of this demand. Indeed, at times the controversy regarding psychology's scientific status was very vigorous. Today the question of psychology's acceptance into the fold of science is anything but a lively one. With the considerably enhanced prestige which psychology now enjoys, particularly in the applied field, there is less urge to stress our scientific status. Having become more scientifically reputable in our own right, we are not so sensitive on the matter.

Of course many of the senior members of this audience, who themselves entered the lists in the cause for scientific recognition, will be anxious to point out that this is a very one-sided view and that their efforts were directed towards a much more significant aim than the mere attainment of scientific prestige.

Without wholly discounting the possibility of rationalization in such a protest, one must agree that there was a great deal more than prestige involved. Viewed from a more appreciative standpoint, the effort to establish psychology as a science was the culmination of a growing concern among psychologists regarding the validity of psychological knowledge. Speculative

<sup>1</sup>Presidential address, delivered at the Annual Meeting of the Canadian Psychological Association, Winnipeg, May 28, 1948.

psychology was becoming outmoded largely because of its practical ineffectiveness; and in order to build a sound foundation for practical advance, a greater emphasis upon the validation of psychological knowledge was needed. The established sciences had already progressed a long way in the development of methods for carrying out the type of validation that was sought, and the psychologists who urged the scientific claims of psychology had as their primary aim the application of these methods to their own field of study. Today much of this struggle is forgotten. Psychology has advanced a considerable distance in applying the methods of science to the problems of human thinking and acting, but for the sceptical mind there still lurks a suspicion that perhaps we have not advanced quite the distance we think we have. In any case it should prove beneficial to review how effectively we are now applying the scientific methods of validation to our subject-matter.

It is with such a review in mind that I have prepared these remarks. It is my purpose to deal critically but very briefly with the methods which psychologists employ to validate their knowledge. For this purpose I shall assume validity to mean the type and the adequacy of the evidence that is provided to support the correctness of a statement. Validity thus defined is a matter of degree, and the methods of validation will be taken to mean the ways by which psychologists derive support for the correctness of their statements. I shall intentionally stress the weaknesses of these methods rather than their value. My remarks will deal with seven such methods of validation that are in current use among psychologists. These are not considered to be wholly distinct from one another. They overlap and may occur together in various combinations in any one instance. For the sake of convenience, I shall label these methods as follows: (1) the authoritative method. (2) the theoretical method, (3) the method of illustration, (4) the observational method, (5) the experimental method, (6) the statistical method, and (7) the pragmatic method. My treatment of each of these will necessarily be sketchy. To deal with any one of them completely would require more than the entire time at my disposal. I shall merely touch upon each in turn and leave it to those who may be interested to pursue the matter further.

First, the authoritative method—this refers to the common practice of supporting otherwise unsubstantiated statements by reference to some authority or expert. The adequacy of this method ranges all the way from mere name-mentioning to the use of detailed references or to more or less complete descriptions of the methods which the quoted authorities used to support their assertions.

Authoritative name-mentioning is a frequent practice in psychology. For example, consider the following instances gleaned from various psychological texts that are in current use: "Young people feel more keenly than do their elders, for as G. Stanley Hall pointed out, the life of feeling has its prime in youth"; "As was recognized by Ebbinghaus, rhythm is an important factor in learning"; "The dominance of one of these processes over

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the other determines the degree of pain or pleasure as indicated by Ribot." These are but a few of many such statements that appear in current psychological texts. Omitting any instances where adequate references were supplied or where any statement of method was given, I have found the incidence of such name-mentioning to be as follows in three psychological text-books in present use. In text-book A, in a chapter on "Learning," of some 14,200 words, there were 28 references in all of which 12 were classed as mere name-mentioning. In text-book B, in a chapter of 8,704 words, on "Feelings and Emotions" there were 19 references of which 8 were classed as name-mentioning. In text-book C, in a chapter of 10,883 words, on "Remembering" there were 31 references of which 11 were classed as name mentioning. Approximately, therefore, in 40 per cent of the occasions when authoritative references were made in these chapters, the reference could be considered as nothing more than name-mentioning. It would appear from this that psychologists are somewhat addicted to name-mentioning in order to support their assertions and one may assume that a practice similar to that found in text-books prevails just as widely in classroom instruction. The use of this method of validation is more akin to the practices employed by the purveyors of cigarettes and cosmetics than it is to any accepted method of science. One is moved to suggest that it is time for psychologists to strive for scientific maturity and employ detailed references and descriptions of method when they refer to authorities or experts. Of course a belief in the efficacy of calling upon names is deeply rooted in our culture and doubtless some psychologists will continue to swear by their psychological lares that their statements are true.

The second method of validation mentioned is the theoretical method. This may be described as the attempt to substantiate a statement by indicating that it is in agreement with some theory. Illustrations of this are difficult to give because the eclectic approach adopted by most psychologists does not encourage its use, and because in those instances where some theoretical standpoint is adopted, the whole treatment of the topic is so closely woven into the theoretical pattern that it cannot be expressed by a brief statement. The following, however, gleaned from psychological writing, will suffice for illustrative purposes. "The symbolic nature of dreams stems from the dynamic character of the subconscious mind," "Telepathy and clairvoyance are identified as special forms of extra-sensory perception." "All objects of remembering are altered in the direction of some balanced, symmetrical pattern in accordance with the law of pregnance." "The adaptive direction that is evident in any trial and error process is in keeping with the presence of a Gestalt." This type of validation is contrary to the logical proposition that facts are used to support theories rather than the converse. I do not consider that it is acceptable as a scientific method of validation.

Sometimes a theoretical type of validation is expressed in terms of a mathematical formulation. This may be little more than claiming that a

statement can be shown mathematically. On other occasions an extensive mathematical proof is provided to support the assertion, as, for example, by the use of Spearman's tetrad equation or by reference to the techniques of factorial analysis. In such instances it is necessary to distinguish between the use of mathematics as a method for parametrical calculation and analysis, and attempts to base psychological assertions upon mathematical procedures. Human conduct does not of necessity conform to the theory of numbers. When, for example, psychologists claim that mental states can be analyzed into independent factors they are speaking mathematically and not psychologically. Psychologically there can be no real independence of mental states, for, at the very least, they are all dependent upon the integrated functioning of one organism.

Validation by illustration and example ranges all the way from the use of analogies and incidental anecdotes to carefully detailed case histories. It is difficult to draw any definite distinction between the use of these for illustrative purposes and their use for substantiating assertions. The use of the analogy is common in psychological science. Some analogies are derived from the physical and biological sciences, whereas others are diagrammatic such as appear in geometric or sociogram form. Logically, analogy is not a form of validation at all. It does not constitute an acceptable method of proof.

Psychologists have been somewhat inconsistent regarding the use of anecdotes in that on the one hand they discredit the value of single instances in support of an assertion, and on the other hand they proceed to use them.

Case histories enjoy a very popular vogue at the present time. We find them sprinkled through almost every form of psychological literature. But there seems to be an unfortunate lack of well-established principles for determining their use. As a consequence many questions come to mind. For example, are fifty case histories more valuable than one? Perhaps—but should there not be some rules for sampling when case histories are presented? What principles, if any, determine what are the relevant data to include in a history? One could go on raising such questions, and in view of the extent to which case histories are employed, is it not time that more critical thought was devoted to their value? It would appear that some modern psychologists have permitted their very commendable, increased interest in people to obscure their critical judgment. Dramatic though they may be, human interest stories cannot be accepted as adequate forms of scientific validation.

The fourth method of validation follows very closely from what I have just said and refers in general to those instances of validation which are based upon systematic observations of people in their natural habitat as distinct from the artificial setting of an experiment. The prototype of this form of validation is probably to be found in biological science. That it is an acceptable means of validation no one would deny, but again there is need for some more definite principles to govern its use. Some decades ago both

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Titchener and Watson put forth certain principles of observation within limited frames of reference, and although their work produced beneficial effects upon psychological observation, their methodological implications were too restrictive for general purposes. Even in biological science, the principles of observation do not appear to be any too clear. What significance, for example, can be put upon isolated occurrences that are noted in the course of field studies? Questions such as this ordinarily remain unanswered.

The fifth method, which is the experimental, has received enough critical consideration to make any extensive elaboration unnecessary here. In psychology its use varies all the way from simple demonstrations to highly controlled experiments. Some of the weakness in psychological experimentation seems to stem from too many of the experiments being hurried. This probably arises in some degree from the pressures placed upon graduate students to complete the requirements for a graduate degree, upon the demand for progress reports on the part of government and other agencies which finance research, and upon the urge to appear in print. In the field of experimental psychology generally, there does not appear to be sufficient emphasis upon the repetition of significant experiments in order to confirm the findings of previous investigations.

The sixth, or statistical method of validation, has become so extensively applied that it touches all the other methods at some point. In general, statistical validation depends upon two broad principles, namely, that of the probability function and that of correlation. Neither of these supplies definite answers to problems in that they depend upon both sampling and variance. The contradictory nature of many of our statistical findings should be conducive to an attitude of considerable caution on the part of those who use these methods. Unfortunately, such does not always seem to be the case. Indeed we have reached a stage where we seem to take it for granted that statistical studies will often show conflicting results. In view of the existing confusion which this occasions, it would appear wise to devote more attention to the reasons for such contradictory results. As an illustration of this condition, the following results were taken from a recent study published in one of our psychological journals. First, six studies were reported where leaders have been found to be vounger than nonleaders, ten studies were reported where leaders were found to be older, two studies were reported where no difference was found and one study reported that the relationship differed with the situation. Second, nine studies were reported where leaders were found to be taller, two studies were reported where leaders were found to be shorter, two studies where no difference was found, and one study reported that it depended on the situation. Third, seven studies reported that leaders were heavier, two studies reported that they were lighter, and two studies reported no difference. Of course, this study does report more instances where the statistical findings are in agreement than where they are in disagreement, but nevertheless the prevalence of conflicting statistical results in psychological studies should be a matter of critical review.

The same situation applies with regard to the wide discrepancy found in coefficients of reliability and validity, when calculated for the same test by different investigators. The prevailing tendency for the authors of tests and their co-workers to obtain significantly higher coefficients than those obtained by other investigators should lead to a rule that such coefficients must always be accompanied by an adequate description of the population of cases on which the coefficient is based.

The whole statistical situation is becoming even more difficult now that small sampling methods are being applied by psychologists. Unfortunately, many uninformed investigators seem to believe that these methods fully justify the use of small numbers of cases. They fail to realize that particularly in the social sciences, these methods are largely in the form of corrections to be applied where the number of cases is unavoidably small. Moreover, the effective use of these methods usually involves very special modes of sampling, which many investigators seem to ignore. The sampling methods employed in statistical studies generally would profit greatly by a more careful application of basic principles, and the outcome might be statistical results that are less equivocal than those which clutter up our literature at the present time.

The last method of validation I have rather loosely termed the pragmatic method, and it varies all the way from appeals to common sense to careful demonstrations of the value of psychological knowledge in practical settings. In the last quarter-century psychologists have demonstrated the practical value of their science more effectively than did psychologists during the preceding centuries of psychological study. While the pragmatic method often resorts to simple statistical procedures, as a rule its emphasis is not primarily statistical. In many instances the point of the method appears to be a simple demonstration that the use of psychological techniques produces better results than other methods that have been tried. Thus, the practical proof for a psychological test is often a comparison between the results obtained by the test and those obtained by other methods of selection, or again the extent to which the test can pick out people of a certain sort. Other instances would be the agreement of an opinion poll with a vote, or increased production resulting from altered working conditions. There are many such instances that might be mentioned where the emphasis is upon a practical demonstration rather than upon a scientifically searching method. This method is an acceptable one for demonstrations of practical usefulness. But the means employed to demonstrate practical validity are often so lacking in refinement that the findings have little generality. The fact that a selection procedure has practical value in one setting is no real guarantee of its worth in another. Such practical findings should not be accepted as e-

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having equal validity with data derived from carefully controlled studies.

As stated at the outset of my remarks, I have touched but briefly on these so-called methods of validation. Many additional comments that could be made have been omitted. My remarks have been definitely critical. It has not been my intention to give a nice address, because I believe we should be more aware of our shortcomings. Too much poorly validated material is being published in our numerous journals and is being incorporated into our text-books and carried over into classroom instruction. Unfortunately, too many students, and one even suspects some instructors, seem to accept uncritically what appears in the text-books. This naivety weakens the whole fabric of scientific psychology. A higher and more uniform standard of validity would strengthen our scientific advance.

These points are more cogent now than they were some years ago. We have entered into the stage of mass production. Psychological data, good, bad, and indifferent, pour through our psychological journals in an everincreasing flood. One does not deprecate this, for such accumulations of data are the backlog of science. But where mass production prevails, as it does now in psychology, it is not unlikely that quality may deteriorate unless repeated emphasis is placed upon our standards. The quality of our data should improve along with its quantity. Students of psychology need to be encouraged to devote more time to the exacting and oft-times tedious study of psychological methodology rather than urged to engage in the infinitely easier task of amassing more data.

However, in spite of our inadequacies, the status and significance of psychology grows apace. Why? — because of the inherent significance of the subject-matter of psychology. There is nothing that is more important than human thinking and acting. Indeed the importance of everything can be judged in terms of its bearing upon human affairs. That which has no effect upon mankind is on that account unimportant. Psychologists in the last few decades have done a great deal to enhance the value of their science by becoming less interested in psychological abstractions and more interested in people.

Moreover, in spite of its methodological weakness, psychology does present a much more objective view of man and his conduct than does any other approach. Psychologists have avoided many of the errors of so-called common sense which result from preconceptions, misbeliefs, and prejudices.

Such objectivity has wide appeal to all reasonable people.

The weaknesses apparent in our knowledge do not seriously impair our status in competition with other less objective approaches. But the value of our knowledge can be enhanced by improving its quality. The longer we continue amassing questionable data, the more difficult will be the task of correcting our misconceptions later. If we can improve as we go we can greatly strengthen our science and extend its value in helping to overcome some of the awful difficulties which beset man's path.

# THE TEACHING OF PSYCHOLOGY IN CANADIAN UNIVERSITIES<sup>1</sup>

### R. B. LIDDY University of Western Ontario

THE Standing Committee on the Teaching of Psychology appointed by the Executive of the Canadian Psychological Association for the year 1947-48 has consisted of the following members: E. S. W. Belyea, K. S. Bernhardt, R. B. MacLeod, Leola E. Neal, R. H. Shevenell, Louise M. Thompson, D. C. Williams, and R. B. Liddy as Chairman.

No specific directions were received from the Executive, and in the absence of definite terms of reference, the Committee itself undertook to decide in what ways it would limit its activities, Some circumscription of its task seemed necessary if for no other reason than that the Committee's work evidently had to be done, if not entirely, at least almost entirely, by

correspondence; and the time was short.

It was concluded that a survey of certain phases of undergraduate psychology in Canada would perhaps be the most helpful way to initiate an undertaking which inevitably will require, if done properly, prolonged study. The members of the Committee would emphasize that what has been accomplished to date is but a beginning. The examination of the programmes and policies that characterize or should characterize the undergraduate and graduate teaching of psychology in our Canadian universities is obviously a continuing task; it is also, we believe, one of the most important projects with which the Canadian Psychological Association is faced.

The method employed by your Committee was as follows: a list of questions pertaining to the teaching of undergraduate psychology was prepared and submitted for revision to each member of the Committee. A questionnaire was finally formulated and then sent out to the heads of Departments in which psychology is taught in the degree-conferring institutions in Canada. Professor Shevenell of the University of Ottawa undertook to carry on the correspondence with the Roman Catholic institutions and to prepare and present the findings of the Committee on that section of our work. The present report, therefore, is based on the answers received from the other Canadian degree-conferring institutions. These are, in order from west to east: University of British Columbia, University of Alberta, University of Saskatchewan, University of Manitoba, University of Western Ontario, McMaster University, University of To-

<sup>1</sup>This paper has been prepared by the Chairman of the Canadian Psychological Association's 1947-48 Standing Committee on the Teaching of Psychology. It, and the brief statement that follows, prepared by Professor R. H. Shevenell of the University of Ottawa, will provide readers of the Canadian Journal of Psychology with the essential features of the Committee's Report as presented to and accepted by the Association at its Annual Meeting in Winnipeg in May, 1948.

ronto, Queen's University, McGill University, Sir George Williams College, Bishop's University, University of New Brunswick, Mount Allison University, Acadia University, Dalhousie University.

In only five of these fifteen universities is there a separate Department of Psychology. These are University of Saskatchewan, University of Manitoba, University of Toronto, McGill University, and Acadia University. In five, psychology is taught within the Department of Philosophy, and in two within the Department of Philosophy and Psychology. In the three remaining institutions, the work in psychology is carried on under the general headings of Psychology and Education, Philosophy and Education, or the Social Sciences Division.

The total registration in all undergraduate courses in psychology in these fifteen universities is reported as 13,327, the largest enrollment being 3,195 and the smallest 46. Twenty-nine instructors are listed as full-time employees in psychology, and there are 39 who give only part of their time to this subject. The members of the latter group vary in rank from full professor to instructor and special lecturer, and their academic activities are divided between psychology and such other fields as philosophy, sociology, education, child study, home economics, psychiatry, counselling, clinical practice, industrial practice, and the administrative positions of dean of arts and dean of women.

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There is an Honour Course in psychology in ten of these institutions with a total registration of 468 students, 277 of whom are at the University of Toronto. The ten institutions are University of British Coumbia, University of Alberta, University of Saskatchewan, University of Manitoba, University of Western Ontario, University of Toronto, Queen's University, McGill University, University of New Brunswick, Acadia University. The requirements for an Honour Course vary considerably from university to university. In the Maritime Provinces the Honour Courses, like the General or Pass Courses, require normally four years from Junior Matriculation. This is the case also at McGill and at the University of British Columbia. At Acadia and the University of New Brunswick, the two non-Catholic Maritime universities with Honour Courses in psychology, and at McGill and the University of British Columbia, the student taking honour psychology begins in the sophomore year and carries on his studies throughout the last three of his undergraduate years. At the University of Western Ontario also, the honour work begins in the sophomore year, but students enter the university with Senior Matriculation standing, and in their freshman year must take work that is basic to several Honour Courses and includes an introductory course in psychology. At Toronto the Honour Course in psychology is reported as a four-year course from Senior Matriculation with a curriculum separate from that for Pass or General students. The first year of this four-year course is one common to several Departments

and is called Social and Philosophical Studies. It includes but one course in psychology. The Honour Course in psychology at the University of Alberta, University of Saskatchewan, University of Manitoba, and Queen's University, is reported in our questionnaire as a four-year course from Senior Matriculation.

Further comparison of the honour work in the various institutions should be undertaken. It is a task that will require careful examination of calendar regulations and requirements and one that we gladly delegate to the Committee for next year. We should beware of making a fetish of uniformity in requirements and in the content of courses; however, too wide a variation in the quantitative and qualitative standards among our Canadian universities should, if possible, be avoided. Attention might well be given, it is suggested, to the advisability of deciding, at least in general terms, what the minimum qualifications for honour students should be. The current wide variation in standards at the Honour B.A. level certainly does not facilitate the exchange of students for graduate work in psychology.

Among the answers to the question, "What in general distinguishes your Honour Course subjects from your General or Pass subjects in psychology?" were the following: more research and individual study are done by the student; more difficult work, taken at a greater speed, is required; the seminar method is used, more essay work is required; the Honour Course provides a more intensive study of more areas of psychology; there is a more liberal use of journals and primary sources; more courses in psychology are required; special courses are provided for Honour students.

As already reported, there are at present 468 students registered as Honour students in psychology in the ten Canadian universities listed above. Apparently little systematic attempt is made in any of these institutions to provide educational guidance for freshmen who are wondering whether to begin to specialize in psychology. When asked on what basis students in the Honour Course in psychology are selected, one respondent answered that the student selected the course. The implication here appears to be that the staff has no part in it. The chief hurdle to be met by one who wishes to make psychology his major field of concentration is a relatively high standing in some or all of his first year subjects. Some reference is made in the answers to the interview as a determining factor, and some emphasis is placed on promise of research productivity and professional plans. It would seem, however, that almost any student with a reasonably high academic record as a freshman may confidently expect to enter, if he wishes to do so, upon an Honour Course in psychology. Provision is commonly made for his being transferred to a General or Pass Course if he fails to reach the academic standards set by the Department.

The motives that lead students to want to take our Honour Courses are said to be an interest in psychology, a desire to prepare for graduate work

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in psychology, to prepare for social or clinical work, to become industrial or school psychologists, to prepare for the ministry.

It has often been argued that Honour Courses in a liberal arts college should not only enable the student to obtain a thorough grounding in his field of special interest, but should provide as well a curriculum sufficiently varied to contribute to a liberal education. Our Honour Courses in psychology appear to accomplish this end fairly well. The programme of studies provided for students specializing in psychology requires them, as a rule, to select subjects from departments other than that of psychology. Among the non-psychological subjects most frequently mentioned in this connection are courses in philosophy, physiology, zoology, economics, sociology, anthropology, and mathematics. Some of our universities permit students to select as options on their Honour Course additional courses in certain of these subjects as well as in English, history, physics, chemistry, and modern languages.

One of the topics not studied this year by your Committee is the degree to which courses in psychology within a given university overlap in content. This is without doubt a problem for serious investigation. It is one to which the Executive Secretary of the American Psychological Association gave his attention in a revealing article in a recent number of The American Psychologist.<sup>2</sup> The present organization of our courses lends itself almost inevitably to much more repetition than is pedagogically advisable. A wise planning of curricula, with this danger in mind, would almost certainly lead to a radical reorganization of some of our courses. This would seem to be a problem primarily for the individual university to attempt to solve. The Standing Committee on the Teaching of Psychology may, however, be able to render considerable assistance by pooling the results of suggestions deriving from the various universities.

An attempt was made in our questionnaire to ascertain how much time Honour students are required to give to courses in experimental psychology. In one of the ten universities where an Honour Course is provided, no courses in experimental psychology are at present on the curriculum. At one university, McGill, approximately one hundred hours are required in the third year, but experimental courses in the fourth year are optional. In the remaining universities experimental courses are required in at least two of the three final years. Five universities give an experimental course in the second year, the total number of hours varying from 50 in one to 112 in another. In the third year again, five universities provide an experimental course, and the range of hours is the same as in the second year. In the fourth year, six departments require experimental work, the range in hours being from 60 to 112. One university requires the honour students to take

<sup>&</sup>lt;sup>2</sup>D. Wolfle, "The Sensible Organization of Courses in Psychology" (*The American Psychologist*, 1947, 2, 437-45).

altogether 336 class hours in experimental courses, that is, 112 in each of the three last years; whereas not more than 120 hours altogether are required at another university.

As would be expected, the facilities for doing experimental work in psychology differ considerably. In one institution the psychology laboratory is housed in the geology laboratory, (an attempt doubtless to keep psychology down to earth!), in another there is only "a small amount of equipment and there is insufficient staff." Accommodation for from twenty-five to thirty students with reasonably satisfactory equipment is reported by several universities. At McGill there is an elementary laboratory consisting of one large room plus five smaller rooms including a sound-proof room and a photographic dark room, an advanced laboratory of eight rooms including an operating room. At Toronto there is, to quote the reply received, "a large undergraduate laboratory, several smaller rooms and a fair supply of standard equipment."

In this connection it may not be irrelevant to quote a paragraph from the Report of the Harvard Commission on The Place of Psychology in an Ideal University.

The facilities for psychology in an ideal university would make the present laboratories, seminar rooms, scattered libraries and inadequate instrumentation in our universities seem primitive indeed. They have not yet been realized. In comparison with the buildings and equipment devoted to the physical sciences or even the other biological sciences, psychology in nearly every university presents an unhappy contrast. In terms of student interest also, psychology needs and deserves facilities far more extensive than is the case in our larger universities. But an additional reason for providing better facilities for the department of psychology lies in the still continuing growth of the subject and the substantial probability that psychology could add to the excellent record of significant contributions and usefulness it made when given large support as part of the war effort.8

In the majority of the ten universities to which this part of our report applies, Honour students must spend some time in field work, such as testing school children, assisting in clinics, or conducting opinion surveys. The amount of time once more varies widely. Five universities require throughout the whole of the undergraduate period not more than ten hours in practical work of this kind. The University of Manitoba, however, reports 150 hours spent in this way, Toronto 90, McGill approximately 75, Queen's 40, Acadia 30 to 50.

Only one question appeared on the questionnaire pertaining to examinations. This was worded as follows: "Are your students given a comprehensive test at or towards the end of their Honour Course? Is it oral and/or written? How long is the examination?" In seven of the ten universities such a comprehensive examination is given. Only one university at present

<sup>8</sup>The Harvard Commission. The Place of Psychology in an Ideal University (Cambridge: Harvard University Press, 1947), 39.

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relies entirely upon the oral comprehensive. Two others are introducing the comprehensive examination for the first time this year and the four others use the written test. The length of this written examination varies from two hours to six hours (two three-hour tests).

Psychology is taught in a number of faculties other than the Arts faculty and in departments other than those emphasizing psychology. In one university the Department of Psychology provides instruction for students in Medicine, Physical and Health Education, the School of Nursing, Engineering, Occupational Therapy, and Optometry. Elsewhere, courses are offered to students in some of these faculties or Departments and as well to those in Education, Agriculture, Industrial Relations.

In all fifteen of the non-Catholic universities to which the questionnaire was sent at least one introductory course in psychology is offered. The number of hours per academic year for this introductory course varies from 30 to 90. In one university there is only one other course, namely, social psychology, provided at present for regular intramural students. Additional courses in this university have been offered in the summer school. A total of twenty-seven different courses in psychology is offered for undergraduate students in another university. The median number of courses for the fifteen universities is ten. In the institutions providing an Honour Course in psychology the range in number of courses is from eight to twenty-seven. These figures are somewhat misleading because some of the courses in certain of the fifteen universities are offered as one-term courses only.

Social psychology is on the curriculum of all fifteen universities. Child psychology, under this or some similar name, is provided in ten universities, and at least one experimental course in nine. In seven of the fifteen institutions there are courses in abnormal psychology, history of psychology, mental testing, and statistics. Some of the other courses less commonly offered are adolescent psychology, educational psychology, comparative psychology, mental hygiene, clinical methods, applied psychology, industrial psychology, psychology of learning, of sensation and perception, of personality, of motivation, of adjustment, of religion.

The lecture method is used widely in the great majority of these courses. One university reports that only 50 per cent of the time is given to lecturing in the introductory course. All others, however, give more, and in most cases much more time than this to lecturing. In other courses the percentage of time given to lecturing as compared with that given to oral reports, general discussion, demonstrations, etc. varies considerably. In general, however, except for the experimental courses, those listed as reading courses, and one or two others such as mental testing, the method used by instructors is very largely the lecture method.

It is generally recognized that courses of study are not ends in themselves. The building of a curriculum for undergraduate students who are specializing in psychology should, therefore, be determined in large measure by the ends to be achieved. Your Committee tried to discover what these ends are so far as Canadian universities are concerned. Heads of Departments were asked to state briefly what they considered to be the special function of an Honour Course in psychology in a liberal arts curriculum. One respondent expressed the opinion that "an Honour Course ceases to be concerned fundamentally with a liberal arts education." Our function, he believes, is to train specialists, and subjects taken in other fields by our students should support that specialty. It is possible that this view is implied in one or two other answers, for emphasis in these is placed upon the importance of providing a balanced curriculum for those specializing in psychology or upon providing a higher degree of specialization as a basis for advanced work.

Others, however, stress the value of cultivating the scientific attitude, the attitude of critical inquiry concerning psychological problems, the ability to view human problems objectively. The Honour Course in psychology, according to one reply, should give the student a broad and sound introduction to the problems, facts, and methods of psychology as a science. Its function is not to train him in the techniques of applied psychology. Intensive work in psychology with aims such as these may well contribute to the ends toward which a liberal education should strive. This at least seems to be the opinion of the majority of the respondents.

An item in the questionnaire similar to the one just considered, but more general, was as follows: "What are your chief aims in teaching undergraduate psychology?" The answers here were in most cases not unlike those provided for the preceding item. Many of them could nicely be classified under one or other of the five objectives listed by Dael Wolfle in a recent article in the *Psychological Bulletin*. The five objectives he mentions are:

- 1. To teach facts and principles of psychology.
- 2. To develop scientific method or habits of critical thought.
- 3. To provide better ability in making personal adjustments.
- 4. To prepare students for later courses, or interest them in psychology.
- 5. To teach what psychology is and is not, or eliminate popular superstitions.

Our respondents often express the objectives differently but the meanings are the same. Our chief aim, they say, should be to make the student curious about human nature, to create an awareness of the complexity and importance of human relations, to train him to adopt an objective attitude to himself and to others, to increase self-knowledge and healthful personal adjustment, to eradicate superstitious beliefs about things psychological, to provide as adequate a background as possible for further psychological study.

<sup>4</sup>D. Wolfle, "The First Course in Psychology" (Psychological Bulletin, 1942, 39, 685-712).

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Two other questions remain for comment. They are closely related. First, "What appear to be the chief obstacles in your university to a more efficient teaching of undergraduate psychology?"; and secondly, "In what ways do you think the classroom teaching of psychology in our Canadian universities might be made more helpful?"

The obstacles to efficient teaching most frequently mentioned in the replies are the large size of classes, and the lack of a sufficient number of instructors. This is, of course, a serious problem. In these days in some of our universities the size of the class seems to be determined only by the capacity of the largest available room or auditorium. Some instructors may be able to handle classes of six or seven hundred students in a way reasonably satisfactory from the point of view of good pedagogy. But the great majority of instructors are predestined to failure under such circumstances. Another obstacle mentioned is the lack of opportunity for individual work with beginning students. The lack of adequate library and laboratory facilities is also listed as a serious hindrance in a number of institutions.

The last question for consideration has to do with making our classroom teaching of psychology more helpful. The obstacles just enumerated need to be removed, or at least their disadvantages mitigated, and in addition, according to the replies received, there should be a greater degree of emancipation from textbook teaching. Lectures should supplement, not duplicate, the reading of students. There should be less emphasis on facts as such and upon conventional content, and more concern with the development of a critical approach to techniques and theories. The discussional and tutorial methods are also stressed. Visual aids and audio-visual aids and demonstrations, according to our reports, are frequently used at present in a few classes in a few universities. They should be much more widely used. One of our respondents suggests that our classroom teaching of psychology might be made more helpful if the Canadian Psychological Association would provide a movie and slide service, and if space in our Journal for the description of helpful teaching devices were utilized.

The attempt has been made in this report to do little more than summarize data presented by fifteen Canadian universities. It is largely a factual report. Only incidentally have suggestions or recommendations been introduced. The members of the Committee wish to thank the Department heads or their delegates who have co-operated in providing the data which have made this summary possible.

# THE TEACHING OF PSYCHOLOGY IN ROMAN CATHOLIC INSTITUTIONS IN CANADA

# R. H. SHEVENELL University of Ottawa

THE following statement supplements the article appearing in this number of the Journal written by Dr. R. B. Liddy, Chairman for the year 1947-48 of the Canadian Psychological Association's Standing Committee on the Teaching of Psychology. It presents in brief form data pertaining to the teaching of psychology in Roman Catholic universities in Canada.

There are two kinds of Roman Catholic institutions in Canada, those which grant degrees by virtue of their charter, and those which are affiliated to a degree-conferring University, as for instance, Assumption College affiliated with the University of Western Ontario. The Chairman of the committee advised your reporter to exclude the affiliates. Consequently there were three major institutions to canvass: Laval, Montreal, and Ottawa, and seven smaller ones in the Maritimes: St. Dunstan's College in P.E.I.; St. Joseph's at Memramcook, Sacred-Heart at Bathurst, and St. Thomas at Chatham, all three in New Brunswick; and the three others in Nova Scotia: St. Francis Xavier at Antigonish, Mount Saint Vincent at Halifax, and Ste. Anne at Church Point. If any institution was omitted, it either was considered as an affiliate or was accidently overlooked. For example, St. Michael's in Toronto and St. Patrick's in Ottawa are both integral parts of the local universities.

Four of the seven maritime institutions answered a few items on the questionnaire prepared for the non-Catholic institutions. As was to be expected, each has a course in Systematic Psychology in their courses of philosophy, and the system expounded, as we all know, is that of Thomas Aquinas. St. Francis Xavier and St. Thomas each have a course in Education where introductory psychology is taught.

The three major institutions, Laval, Montreal, and Ottawa, differ widely in their organizations. Montreal has an Institut de Psychologie exclusively on the graduate level under the leadership of Fr. Mailloux. Since this committee was concerned, throughout this present year, only with the teaching of psychology at the undergraduate level, we will not discuss this institution at length.

Both Laval and Montreal have a School of Education which confers baccalaureates, licentiates, and doctorates in pedagogy. In Laval it is the École de Pédagogie, and in Montreal l'Institut Pédagogique Saint-Georges. They are both graduate schools when it comes to conferring degrees, but they both admit a good number of undergraduate students, mostly teachers looking forward to certificates or minor diplomas. However, neither of these schools of education is directly comparable to the undergraduate teaching referred to in our survey.

Ottawa has an Institute of Psychology, which is at present the Department of Psychology of the University, dispensing courses in psychology to the Faculties of Arts, Philosophy, and Medicine.

Let us now consider the teaching of psychology in the Faculty of Arts, at the undergraduate level at Ottawa. The Department has one professor, one associate professor, two assistant professors, all full-time instructors, and six lecturers on a part-time basis. There are 32 graduate students and 106 undergraduates. This year Ottawa is introducing the Honour Course of four years after Grade XIII, or Senior Matriculation. It will begin at the sophomore year, although two courses are offered below that level.

Selection of candidates will take into consideration academic standing and academic ability plus a certain degree of maturity. To remain an Honour student the individual will have to maintain a 66 per cent standing in all courses. Philosophy, physiology, and statistics will gravitate around the core subjects of psychology. Psychology proper will count sixteen hours of lecturing a week. Practice in testing and laboratory experiments, including written reports, are essential features, as are also tutoring and seminars. Assignments call for familiarity with periodical literature and scientific publications. A comprehensive examination, part written (three hours) and part oral (one hour) crowns the student's studies.

The Honour B.A. in psychology does not per se qualify the student as a professional or a semi-professional psychologist. At this stage he can probably be considered a good mental tester or examiner but hardly more. He has specialized to a certain degree, but he has mostly filled in a rich background of information on human nature and the facts and principles of psychology. He has learnt the scientific methods of the social sciences and has developed habits of critical thought. He has matured and become proficient at handling his own problems of personal adjustment. He has mastered the style used in scientific publications and can aptly present his findings before an audience. He is ready to undertake postgraduate work as an immediate preparation for his profession.

At the undergraduate level, and also at the graduate, Ottawa intends to fit into the picture of the universities of the Province of Ontario. We aim to be one of the five universities of the province offering training in psychology with a good amount of similarity in academic organization. Two distinctive features are to be expected: there are courses in French as well as in English, and the students are exposed to the Thomistic point of view. How much good, or how much harm, this exposure will do the student depends mostly on his own attitude.

Ottawa, Montreal, and Laval are firmly convinced that psychology in all its branches has an important role to play in the ideal university. Ottawa (in 1941) and Montreal (in 1942) both embarked on an ambitious programme for the training of psychologists.

# THE PSYCHOLOGIST AS A COUNSELLOR<sup>1</sup>

J. S. A. BOIS Montreal

THREE hundred years ago, Robert Boyle warned his fellow-chemists of the dangers of premature enthusiasm and stated that, although they had justly thrown aside some ancient and inadequate assumptions to replace them by new and better ones, they had established no firm basis, not even a method for achieving such a basis, for a new science. In the last chapter of his monumental book on *Personality*, Gardner Murphy (5) reminds us that psychology today is in practically the same position as chemistry was when Robert Boyle expressed his scepticism.

Psychologists find such scepticism irksome; [writes Murphy] they are like a strong man ready to run his course. Sure of themselves, they are sure they have shaken off, as did the early chemists, the shackles of metaphysics. They have discovered experimental, clinical, and statistical methods. The world is open and free; all that is necessary is to march forward. They are sceptical about everything but psychology; here they radiate confident positivism. So, too, the public, half aware that the economic and political anguish of the modern world is so largely rooted in the maladjustments of human nature and the psychological contradictions of the culture in which it functions, feels such a need for psychology that it elevates this science, if not to a position of central truth, at least to one of golden promise, and clutches the outlines offered by psychoanalysts, gestaltists, and behaviourists. To begin asking first questions over again would be so tedious, so wearisome to the flesh. (p. 914)

However, Gardner Murphy does not shrink from first questions, and he ends his book with a searching discussion of the value of our basic assumptions.

Let me take from another recent book an example of how one of our basic themes, that of learning and intelligence, is sung and danced today by the worthies of our tribe.

Ward C. Halstead (2) devotes the second chapter of his book *Brain* and *Intelligence* to a survey of "the various conceptions of the nature of intelligence that have been seriously set forth by professional psychologists." He concludes this chapter with the following statement:

It is apparent that no generally accepted theoretical framework as to the nature of psychometric intelligence has thus far been developed in support of the many measuring devices which are now widely applied. There can be little doubt that the best of these devices can yield fairly reliable measures of something, but of what? Regardless of what X factor is involved, it is important to note that a relatively high degree or amount of X is compatible with such concomitants as superior social adjustment, inferior social adjustment, superior school work, inferior school work, superior physical health, inferior physical health, well adjusted personality, schizophrenia, good citizenship, criminality . . . Is X a single or multiple factor? Is it predominantly environmentally determined, or is it a direct reflector of basic biological functions of the organism?

<sup>1</sup>Presidential address given at the annual dinner of the Psychological Association of the Province of Quebec, Montreal, May 1, 1948.

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It is clear that for these and other important questions we cannot yet obtain a rigorous answer.... For the present, the situation is fundamentally little different from that prevailing when Lashley wrote in 1929: 'The whole theory of learning and of intelligence is in confusion. We know at present nothing of the organic basis of these functions and little enough of either the variety or uniformities of their expressions in behaviour.' (p.12)

Ladies and gentlemen, I feel no compunction when I agree with such authorized representatives of our science. Yes, indeed, the foundation of our scientific shrine is not very solid yet, and its structure is jerry-built.

The practising psychologist stands between this flimsy temple and the growing crowds of individuals of all ages and conditions, with faces upturned and hands outstretched, who ask for release from their woes and worries, for the secret of life abundant and happy, for success in their business and achievement in their vocation. A few come with blind confidence, some with misgivings, some with a lurking resistance ready to challenge the new prophet, but they keep coming in waves that swell larger and faster, and they want miracles—under some other name, of course, but miracles just the same—something magical that makes things right. Doubtful as he may be in his own heart, the psychologist welcomes the challenge of this situation. He has brought it upon himself, and he keeps on inviting it when he writes books and articles, when he addresses groups and helps individuals, when he elbows room for himself among the recognized professions.

My purpose is to describe this situation as I see it. My word-drawing and painting may give significant material to those of you who are adept at projective techniques. I don't mind it at all. Go ahead and analyze me to your heart's content. Whether I am an exhibitionist or not, I cannot say. But I must confess that I have been looking forward to this opportunity of speaking my mind.

If we admit that psychology is not a full-fledged science, what shall we say of the practising psychologist? What is he? To answer this question, let us survey the time-space continuum and bring into focus other advisers whose function he is trying to emulate. To whom do people go when they are in trouble? To whom do they go when they want advice that is wise and disinterested?

They go to men of good counsel, wherever they can find them. They go to their father or their mother, to a friend more mature than they, to a teacher they hope will understand, to someone who they think has had experience with similar problems, to their doctor, to their minister, their rabbi or their priest. In ancient times, they went to the medicine men, to the wise men of the tribe, to the philosophers or the oracles, to the prophets and the saints, to the lovers of wisdom who were also lovers of men. These lovers of wisdom practised the art of good counsel, the art that is supreme among the arts because it deals with human brains groping for self-understanding,

human hearts panting for reassurance, human bodies made tense by fear and worry.

In our world of today, what does our science offer that is distinctly above and beyond the message of the great men whose insight and understanding are recorded as the cultural heritage of the civilized world? In his book *Peace of Mind*, which deserves more than a host of others the acclaim given to best sellers, Liebman (4) has deftly woven the thin contributions of psychology and psychiatry into this cultural heritage. Like Liebman the writer, the practising psychologist must be in line with the tradition of his predecessors and adapt it to present-day conditions. He must be the artist supreme in a sophisticated and disillusioned culture.

Do I romanticize? You may think so. You may picture to yourself a dynamic sales manager sitting behind his desk. A psychologist is discussing with him a report on a would-be salesman or the conclusions of a market survey. "This is cold-blooded business," you say, "Your artist supreme has little to do here. Your lover of wisdom and lover of men is out of place."

Well, is he really? This sales manager who has called you in, what does he want? He wants more wisdom, more success in his own job, more security, more prestige. Who knows? He may nurse the hope of becoming president of the firm some day. For this he needs you, he needs your techniques, he needs your advice. To use abstruse language, let us say that his ego involvement in the whole procedure is greater than appears. Remember this all along, and you will understand better his objections or his enthusiasm, his resistance or his co-operativeness. Remember this and act accordingly. It works, I tell you. In this situation, as well as in your office where a poor woman sobs and shakes with pent-up emotions, your art is the art of making something out of living and striving human flesh and soul.

Let us put some order in our discussion. By force of habit I write the evaluation of an individual under three headings: (a) his abilities, (b) his interests, (c) his personality. This is as good a scheme as any. We shall follow it.

(a) Abilities. First, what should be the abilities, general and special, of our man of good counsel? His general ability must be a few points higher than that of his client. In all cases it must be of a high order, and graduate degrees are a useful screening device. At the present stage of the development of our profession, where so much depends on the resourcefulness of the individual practitioner, on his skill in meeting new and very complex problems for which his training has not prepared him, I consider this factor of general ability as most important. Very brilliant people will come to you, because they are the very ones who are not content with the standard solutions of their cultural environment. Some crackpots will show up who may look clever; some people will be too clever for you and you may mistake them for crackpots. Be realistic. Find what is your optimum range of em-

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pathy on the general ability scale, and do not go beyond your critical point on the high side. If you do, you will be like the manager who accepts under his direction a subordinate whose mental stature is head and shoulders above his own. There is trouble ahead. Even if you use non-directive methods, you must be able to control the situation. If you are to control it, the client must look up to you, not down.

The situation of counsellor demands also a high degree of mental flexibility. There is no room in the counsellor's chair for doctrinaires, faddists, cultists, single-track minds and hard-boiled logicians. Mental flexibility is in great part a matter of constant training. Your success in practising it will depend on emotional factors, which will be discussed later under the heading of personality. But it will also depend on how well you have cultivated the scientific attitude in your graduate work, and on how successfully you have transferred this attitude from the laboratory to your professional practice and to your own life situations. This is where I consider the non-Aristotelian system of General Semantics valuable, as one among other disciplines. It induces the habit of relativistic thinking; it brings you backstage, where our evaluations take on the rigid mask of words and adopt the conventional steps of pre-scientific syntax.

The more varied your own experiences, the more flexible you can be. By experience I mean a thoroughgoing dip into a cultural *milieu*, a form of art, or a life situation that is very different from what you were habituated to. For instance, it will help you to know French to the point where you see the world with French eyes, react to French literature and folklore as you would to your own, enjoy Corneille and Racine as you do Shakespeare, and realize fully that these two cultural experiences cannot be equated nor translated one into the other.

You may find this training in the arts, by learning to enjoy Picasso as intensely as Raphael, Constable as Manet, Gershwin as Bach, Ravel as Handel, Shelley as Milton, Epstein as Praxiteles. If you claim to be ultramodern in your appreciation of music, literature, sculpture, and painting, and remain systematically cold to the masterpieces of centuries past, you are rigid, already mummified in the present, and not very different from the traditionalists you despise.

Life itself is a good test of flexibility and a powerful means of developing it. Thank your stars if you have been thrown into situations that were varied to the point of being opposite, and if you have survived experiences that you have brought upon yourself by your unwise choosing. Many psychologists—not all—have shown a high degree of flexibility and adaptability during the recent war, passing from academic life to a variety of functions that had very little in common with past experience. Your civilian record may include an even greater list of parts you have played on the stage of your own life. Apart from the fairly common roles of being single,

married, child, parent, subordinate, superior, employee, employer, etc., you may have gone through phases of harrying discord or of blissful harmony in your family life; phases of secure belongingness in your group or of empty isolation among people who did not want you; phases of financial penuriousness when you had to stretch your dollars and pinch your pennies, or periods of affluence when you did not bother checking your balance in the bank: phases of religious exaltation when your faith was the substance of things unseen, or periods of religious doubt and confusion when tradition seemed absurd and all values were in question; phases of success when you felt on top of the world, or phases of failure when your ego was deflated never to soar again; phases of glowing health when you were not even conscious of being so well, or phases of illness that nearly broke the tenuous thread of your life; phases of hope and of despair; phases of glory and of abjection; phases of intense happiness and of dire misery. The wider the field of such experiences, and the higher and deeper you have oscillated on both sides of the average level, the better is your preparation to understand, to comfort, and to guide. Some may have a high capacity for empathy and may do well with only a vicarious experience achieved in their own imagination, but you will admit that there is nothing like having lived through it yourself.

The flexible psychologist has an unrelenting curiosity about every new advance in research, about every new technique in practice. He may choose the school of thought where he feels most at home, the particular devices that suit his personality and his clientele, but he remains open-minded, ready to accept formulations and methods that sound different or appear to clash. He is not exclusively a psychoanalyst, a non-directive therapist, a psychometrician, a semanticist. He accepts the super-ego, the subconscious, the anxiety neuroses, the scores on tests, the interest profiles, and the personality patterns as so many mental constructs, so many convenient fictions, and no more. As any other scientist he keeps looking for invariants and for their dynamic relations, but he remains conscious that his image of the world is not the world outside or inside his own skin, and he remembers

that predictability is the only test of any theory and therapy.

(b) Interests. To be happy and efficient in his work the psychological counsellor must have his interests focused in a particular direction. In what direction? My view is that his professional interests must centre upon the individual first, and primarily on the individual as a functioning and growing unit. The psychologist as such is not an administrator, still less a statesman. His personal interests may cover a very wide field. As a citizen of our struggling democracy, he may well take an active part in agencies that deal with public welfare or world peace. But he should not feel slighted if he is not called upon to save the world in his professional capacity as a psychologist. He should not feel guilty when he realizes that he has done very little so far to influence the policies of the United Nations

or to breach the gap between the communist and the bourgeois states. No responsible person in his senses has ever asked us to take upon our shoulders the burden of mankind. But individuals come to us from every walk of life. Let us attend to them first.

Yes, I know that the problem of the individual is very often the problem of his environment. You can readjust the child more easily if the parents are ready to change the atmosphere of the home. The re-education of a frigid wife is facilitated when you can improve the love techniques of the husband. The efficiency of an executive group will depend more on the teamwork of all than on the efforts of only one or two members. Individuals may be cramped, stultified, or crushed when they have to work in an organization that is functionally out of balance, when they are shackled by administrative procedures that are not realistic, when they are forced to use a communication system that fails to transmit adequate information. I know that new techniques are developing, which centre on the group as the medium of action or as the unit whose structure and functioning we attempt to improve. I have heard of, read about, and used to some extent one or a few of the following: group therapy, psycho-drama, group dynamics, group training, measurement of attitudes, revision of organization charts with due regard to the personality of incumbents, revamping of policies in terms of the human factor, establishment of systems of communication that are more adequate. I admit that we could describe our activities on a continuum that goes from the problem of the individual at one extreme to what Gardner Murphy calls "the economic and political anguish of the modern world," at the other. On this continuum I can picture many sciences, disciplines, and practical techniques that are studying, discoursing, planning, clashing with one another, occasionally altering the course of events or claiming credit for having done so. I see individual psychology and psychiatry, social psychology, sociology, industrial and public relations techniques, the science of administration, economics, history, propaganda techniques, politics, statesmanship, etc., until I reach the end where stand Stalin and the Marshall plan, Berlin and Jerusalem, in the disturbing glare of our newspaper headlines. Where does the puny psychological counsellor stand in this cavalcade? How far can be venture from the familiar haunts of his work on individuals to the assemblies and the battlefields where the mastodons of world politics are waging a cold, unrelenting war?

No, ladies and gentlemen, we are not prepared to offer anything spectacular to the solution of the problems of the world. There will be an International Congress on Mental Health in London this summer. It is a praise-worthy enterprise, and it will bring together a host of earnest workers from our field and from adjacent ones. Watch the immediate or long-range impact it will make on the course of world events, and you will understand what I mean. One single individual, frail but determined Mahatma Gandhi,

stirred a sub-continent into action and arrested the attention of the world. He started a chain reaction in the depths of uncultured masses. Compare his results, or those of any real leader that comes to your mind, with the feeble ripples made on the surface of world events by the best organized and best intentioned congresses of human scientists.

This brings me to our own role in the scheme of things. This role is modest, but it is full of tremendous possibilities. I see it as the role of discoverers of talents, of trainers of champions in every field of human endeavour. Let me illustrate by an actual example. An industrial psychologist is called in by a firm that manufactures a machine widely in use. They have competitors well entrenched in their positions, but they are making headway in an expanding market. Their production figures are 2,000 units per month, and their plant has a capacity of 2,500. When top management makes an economic survey of the present conditions, and projects into the future the curve of possible development, they feel that the capacity of the present plant is sufficient for the next five years. They plan ahead, unhurriedly and cautiously, for the physical expansion of the building, the improvement of machinery, and the organization of sales on a wider scale. It does not dawn on them that the curve they are plotting does not obey economic and technical factors only. They accept as "normal," or shall we say as "a necessary evil," the shortcomings of some of their top employees and their failure to attend properly to the human factor.

The psychologist finds that the executive group of the firm is weak. The works manager is old-fashioned and unable to keep pace with the times, the sales manager has been unequal to his task for years, the controller is not conscious of his capacities for development. The general manager has taken over from a predecessor whose performance was average or lower. There is no department of personnel; hiring, training, and firing has been done

haphazardly. Morale is not high.

With the agreement of the general manager, the psychologist deals with each individual problem in order: a new works manager and a new sales manager are promoted from the ranks and the former incumbents are transferred to specially created jobs where their prestige is maintained, their experience utilized, and their whims neutralized; a personnel manager is brought in; the controller and the general manager are evaluated and trained in executive thinking. As each member of this well-selected and well-balanced team becomes more efficient, the situation rights itself as by magic, the whole organization takes on a new life, sales show an upward swing, production runs more smoothly, morale is improving. After a few months, top management has to change its former plans and think of a physical expansion of the plant in two years instead of five. By working on individuals, the psychologist has started chain-reactions that reverberate all over the place. Or, to use a more adequate simile, he has released into creative action

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abilities, skills, and drives that are different from his own and more powerful than he could manage.

The psychologist is interested in normal growth, not in pathological deviations. He is an educator, a trainer; he is not a non-medical psychiatrist. Speaking of the relations between psychology and psychiatry, Dr. Clarence M. Hincks (3), General Director of the National Committee for Mental Hygiene, reminds us that our specialty as medical psychologists should be health training.

... by the term health training ... I am not referring to health education for the public at large, but rather to individual training, or training in small groups that has for its aim either the promotion of positive health or the furtherance of recoveries among

those who are in a depleted state of health. . . .

... As a research approach, psychoanalysis is magnificent. In the field of therapeutics it has great limitations; but a significant forward step could be taken in therapeutics via the avenue of health training wherein full advantage is taken of the insights provided by psychiatry and psychoanalysis. And psychologists rather than psychiatrists could be expected to foster necessary progress because of their fundamental interest in all that pertains to learning and to training....

... In connection with many disabilities, including the psychoses and the neuroses, the fact may very well emerge that health training is the most potent of our thera-

peutic instruments. (p. 193, 194)

Medical psychology is only one of the many fields that are open to the psychological counsellor. If we follow Dr. Hincks' advice and work in this field as is expected of us, we shall not study and treat anxiety, but we shall study people who have surmounted fear and worry; we shall not think in terms of frustration, regression, and complexes, but we shall think in terms of achievement, progress, and emotional integration.

If we pass from the field of medical psychology to those of child psychology, guidance, educational psychology, industrial psychology, and adult counselling, it becomes more and more evident that our function is one of unblocking the arrested process of growth, of fostering development up to normal and beyond, of raising the average efficiency of individuals, of family, of occupational or industrial groups. If we maintain this attitude the public will grow to see us as different from the psychiatrist and psychoanalyst. We shall be recognized as specialists in made-to-measure training in sane thinking, healthy feeling, and successful behaving.

(c) Personality. What of the psychological counsellor's personality?

What innate and acquired traits should he possess?

This has become a very important question today. Psychologists go into the applied field in larger and larger numbers, and it makes us realize that our standards of selection and our measures of achievement must shift in a new direction. We are still in need of a great number of teachers, writers, and research workers, but we want also a goodly number of competent managers of human behaviour, managers of their own behaviour and the behaviour of their clients. Speaking on "Psychology as a Profession,"

in a symposium published last year under the title of Current Trends in Psychology, Wayne Dennis (1) writes:

Not only must we be able to determine who shall be admitted to our profession; it is important that we set the admission standards very high. For example, nothing is gained by requiring the Ph.D. degree if the degree may be obtained by anyone. In the past psychology has had some excellent people, but it has had a share of second-rate intellects, of eccentrics, and of fuddy-duddies. Psychology may owe a service to these people, but it does not have to take them into its fold. In terms of its effectiveness, it cannot afford to do so. To succeed as a profession, we must have a highly selected personnel. (p. 10)

Little research has been done to my knowledge in this area of desirable personality traits in the practising psychologist. Is there any course of training given in our graduate schools on "How to deal with people in psychological practice"? I cannot say. In our professional journals there are very few articles on this subject, and, of those I have read in the course of the past year, there was one in the *Journal of Consulting Psychology* that struck me as most elementary, almost naive. It indicates that, when it comes to dealing with clients, our thinking is lagging way behind that of the average salesman of professional services.

Let us go deeper than the do's and don'ts of *How to Win Friends and Influence People*, and try to describe a few basic features of the psychological counsellor's personality.

First, he should be emotionally mature. Our profession cannot be the haven of refuge for people who run away from their own problems by poking their noses into other people's affairs.

I understand that an orthodox training in psychoanalysis includes the analysis of the trainee. I imagine that it gives the student the opportunity to appreciate the techniques by having them applied to himself. It must also give him a chance to re-structure his whole personality, to gain insight, flexibility, and maturity.

We have nothing of the kind in psychology, and I do not think it would do us any good to try and ape psychoanalysts. But we must also remember that our role is not so detached as that of the medical practitioner who can prescribe drugs and handle the scalpel when his own health is not of the best. We are trainers, and I would rather compare our work with that of a physical instructor, or of a platoon commander who has to put his men through the obstacle course. How can you conduct a difficult interview, directive or non-directive, on a problem that stirs up your own emotions, reminds you of your own insecurity, takes you into sexual areas where you feel ill at ease, gives the lie to your pet theories, or evokes your strong aversions? How can you help your client overcome fears and worries that you yourself have not mastered? How can you deal with family problems when you do not get along with your wife, advise in personnel relations when you

cannot keep a secretary, train in teamwork when your fellow-psychologists find you a trouble-maker? How can you teach the reality principle when you shy away from your own self?

The second personality trait that I should like to mention is not easy to describe. Let us call it the ability to make yourself felt as a stirring individual. The recipe to obtain the particular concoction I have in mind would read somewhat like this: "Put in a bit of self-assurance, a bit of humour, a good deal of selflessness, a good measure of sympathetic understanding, some alertness, some interest in the other fellow, a dose of robust optimism, leadership of a kind, a touch of salesmanship, and many more such ingredients. Cover this with a face always relaxed, ready to smile, and earnest when it is time to be.—Serve according to taste."

I have read somewhere that every interview, to be fruitful, should be a positive emotional experience to the client. It should stir up constructive thinking and feelings with a plus-value. Oldfield (6) has established that a conversation is really alive when it goes beyond the stage of an exchange of information and becomes "an interaction of attitudes." He gives the example of the woman who calls her butcher and asks for the usual seven-pound roast for Sunday. The grocer says: "Yes, Madam, thank you," and the conversation ends. It is a mere exchange of information. The roast proves to be tough as leather, and the lady has company at dinner that Sunday. On Monday, she goes to the store in person and gives the manager "a piece of her mind." This time the conversation is a full-fledged "interaction of attitudes," and it makes an impression.

The example is trivial, I know, and you may not find it in keeping with the solemnity of this dinner. However, I feel that it will convey what I have in mind. You must stir up thinking, make an impression. Not that you take this as an objective, mark well. But you must recognize here an indispensable tool of the trade. Make this impression genuine, positive, encouraging, constructive, and what not. But make an impression. Otherwise the clever quack will beat you to the post. I remember a remark that a student made one day, when I was expounding the virtues of general semantics and giving successful cases to prove my point. He asked: "Was it general semantics or the super-salesmanship of the consultant that did the trick?" He had me baffled. I honestly believe that general semantics had something to do with the results, and I hate to pass for a super-salesman. But call it what you will, you must have some of what he called "super-salesmanship."

#### SUMMARY

We are not very well established as scientists and we are newcomers in the professional field. In spite of this, people are coming to us in growing numbers, and expect us to do wonders for them. This puts us in the ranks of the men of good counsel who, from time immemorial, have assumed the role of advisers to their fellow-men. Even the cold-blooded business man of today wants us to be men of good counsel as well as technicians.

To be a man of good counsel, the psychologist must be superior to his client in general ability. He must be mentally flexible, free from prejudices and fixed ideas, ready to make use of every new advance in research, every new technique in practice.

His professional interests must be focused on the individual, and he must remember that the world's economic and political problems are beyond his professional responsibility. His role is to prospect for real talents, to train people in sane thinking, healthy feeling, and successful behaving.

He should be emotionally mature and he should not probe into other people's affairs just to run away from his own personal problems. He should be able to do what he preaches.

Lastly, he must have within himself the spark of a stirring personality and the warmth of a persuasive leader.

Yes, we have many problems to solve. As individuals and as members of our Association. As individuals, we want work and a reasonable income, we want satisfaction from our job, we want the confidence and the respect of our clients. As members of our Association, we want scientific progress, we want high standards, we want recognition from other professions, we want certification on a basis fair to ourselves and to the general public.

Would it help if we had in this province twenty-five or fifty consultants who would measure up to what I have outlined? I think it would. Don't you?

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# INTELLECTUAL IMPAIRMENT ASSOCIATED WITH BRAIN-INJURED PATIENTS AS REVEALED IN THE SHAW TEST OF ABSTRACT THOUGHT<sup>1</sup>

### J. DONALD HOWSON Fredericton, N.B.

The subject of brain injury, or more particularly, the effect of brain injury upon personality, has long interested physicians. Among the students in this field the German neurologist Kurt Goldstein, is outstanding for the clarity he has brought to many of the most difficult problems and for the originality of his point of view and methods. During the War of 1914-18, Dr. Goldstein was director of a hospital for brain-injured soldiers and it became his task to take under his medical care a great many patients with lesions of the brain. He has set forth the fruits of his experience gathered from this war in a volume entitled After Effects of Brain Injuries in War. His conclusions have not been entirely uncontested, but, generally speaking, his methods have been found to be a successful approach to the problem of traumatic brain injury. This study is based on his findings.

Goldstein maintains that symptoms found in patients with brain-injury can best be understood as the result of change in the whole behaviour of the individual rather than as a defect in isolated capacities. He characterizes this change as impairment of the capacity for "abstract behaviour." There are two modes of behaviour according to Goldstein—the abstract and the concrete. He claims further that the abstract and concrete modes of behaviour are dependent upon two corresponding attitudes, which are psychologically so basic that one may speak of them almost as levels.

Goldstein points out that the abstract and concrete attitudes are not acquired mental sets or habits of an individual, or special aptitudes such as memory or attention. They are rather capacity levels of the total personality. Each one furnishes the basis for all performances pertaining to a specific plane of activity. In the abstract attitude we are not directed towards an individual object, but towards a category of which that object is but an accidental example or representative. In the concrete attitude on the other hand, the action is directly determined by momentary sense impressions.

Goldstein came to these conclusions by means of a number of tests which he and his collaborators devised for use on brain-injured patients. One of these, known as the Golb, Goldstein, Weigle, Scheerer Object-Sorting Test makes the distinction between the two attitudes especially clear. Its purpose is to determine whether the subject is able to sort a variety of objects according to general concepts. The procedure was to place a group of miscellaneous articles before the subject. These articles consisted of such things as a bicycle bell, a pair of pincers, two lumps of sugar,

<sup>1</sup>Condensed from an article which appeared in the *Psychological Service Bulletin* of the Department of Veterans' Affairs, Ottawa, by permission of the Editor.

two corks, a small plate, an apple, a screwdriver, a toy spoon, a toy noise-maker, two soda biscuits, etc. The subject was first asked to select one object and was then told to place with that object "all that belonged to it." Then he was asked to group articles with one the examiner selected. In the second phase of the test the subject was asked to group all the articles as he thought they belonged together. If he himself was not able to group the articles in this way, he was presented with new groupings by the examiner, and was asked why they were grouped together in that particular way.

Goldstein and Scheerer<sup>2</sup> report that normal adults behave in two ways on this test. One type of behaviour is by means of the concrete approach, wherein the subject is passively dominated by the sensory impressions of the articles, and responds unreflectively to these claims. The other type of behaviour requires a voluntary act of abstraction, wherein the subject transcends the immediately given sense impression and is oriented by a conceptually developed frame of reference. Though normals were capable of assuming both types of behaviour, patients with functional disturbances of the brain cortex were found to be confined to the concrete.

Such patients concentrated more on the practical use of the objects, and arranged them on the basis of common use in a concrete situation rather than on the basis of broader categories. Also they had the greatest difficulty in shifting from one type of grouping to another. Furthermore, when the objects were placed by the examiner in groups which might be obvious to the normal person, the brain-injured person was not able to state why they belonged together. He could not accept different toys as groups of toys, but took each toy as a single object with which something could be done; in the same way he could not understand that we can form a group of objects based on their similarity of colour. He was impaired in the capacity for abstract behaviour.

These observations of Goldstein and his collaborators are not held by them alone. There seems to be general agreement amongst other neurologists, psychiatrists, and medical men that damage to the brain affects the capacity for the abstract attitude. Investigations made on brain-injured veterans of the War of 1939-45, both on this continent and in Europe, tend to support Goldstein's claims.

During the winter and early spring of 1947 a rehabilitation survey of brain-injured veterans was made by the Department of Veterans Affairs at Sunnybrook Hospital, Toronto. The survey consisted of an electro-encephelegram, a battery of psychological tests, such as the Thematic Apperception Test, Rorschach, Bellevue-Wechsler, and medical and psychiatric examination. Most of the patients had been called in from their employment in various parts of Ontario for the survey.

<sup>2</sup>Kurt Goldstein and Scheerer, Abstract and Concrete Behaviour: An Experimental Study with Special Tests. Psychological Monographs, 1941, 53, no. 2.

About this time there had come into my hands a set of four wooden blocks, which were in the possession of the Department of Psychology in the University of Toronto. These blocks had been made by Mr. Harold Shaw, a designer by profession, and a one-time occasional student in the Psychology Department. His interest in the subject was keen, and he had designed the blocks, thinking that they might be useful as a test of some sort, though he did not know what. Dr. Magda Arnold, who was in charge of all D.V.A. psychologists across Canada, believed that these blocks could be used as materials for a test of abstract thought. Accordingly, under her supervision and guidance, I proceeded to ascertain the validity of the blocks as a means of evaluating intellectual impairment in brain-injured subjects.

### DESCRIPTION OF SHAW TEST OF ABSTRACT THOUGHT

The material used in the Shaw Test of Abstract Thought consists of four wooden blocks, varying in colour, height, shape, size, and weight. There are four shapes—hexagon, pentagon, square and triangle. There are four degrees of the colour grey, each block becoming progressively lighter than the dark grey of the hexagon. Similarly, the blocks vary in height and weight. In addition, the blocks have other features by which they may be graded in a number of sequences. On the top surface of each block, for instance, is one of the four names—rat, lamb, ox, whale. The size of the printing and the number of letters in each name vary from block to block. On the under surface each block has one of the letters—A, B, C, D; there is a hole in the centre of the under surface varying in size from block to block and varying in depth; while along the base of each block there is a notch varying in width, depth and position relative to the corner.

It will readily be seen that this test, while similar to the G.G.W.S. Object-Sorting Test, nevertheless has many advantages over it. The "Shaw Block Test" compresses into four small wooden blocks the numerous characteristics of the various articles in the G.G.W.S. Test. At the same time it confronts the subject with the multiple choice of arrangement equally as effectively as does the Object-Sorting Test, and it demands of the subject one or all of the shifts required in assuming the abstract attitude.

### PROCEDURE

The following written instructions are placed before each subject: "I am going to place before you on the table four wooden blocks, which have a good many characteristics by which they can be arranged in sequence. The blocks do not fit together, but you may turn them any way you like in your attempt to discover various ways of grading them. You have nine minutes in which time I want you to grade the blocks in as many different series as you can. You will name each series to me as you find it."

If the subject attempts to fit the blocks together or to put them in a "fitted-together" pattern, he is reminded that they do not fit together. If he has difficulty in grasping the significance of the words "arranged in sequence," I describe four cars of varying price, and refer to the price as characteristic of the cars. No time out is given for this period needed for explanation. If the subject, after finding a few categories, says there are no more or that he cannot find any more, he is urged to keep trying until his time is up. This was not necessary in the normal group, but was not infrequent in the brain-injury group.

A score of one was given whenever the blocks were placed in sequence; and any clearly defined sequence was accepted. The score was placed in one column, while in a separate column a record was kept of how the subject manipulated the blocks.

For the investigation, I used sixty men who had been called in for the Brain-Injury Survey, sixty neurotics (all males), and sixty normals (also all males). The sixty brain-injury cases were further subdivided into groups of no impairment, severe impairment, and slight impairment. This classification was made after a close survey of the clinical and psychological reports of each subject, and a subject was placed in one of these categories only according to the findings of the psychologists and psychiatrists. On this basis, ten were reported to be unimpaired, ten severely impaired, and forty slightly impaired.

There was found to be a reliable relationship  $(r=.43\pm.02)$  between the I.Q. of the subjects on the Bellevue-Wechsler test scale and the number of responses on the Shaw Test. Accordingly, twenty brain-injured patients were matched on the basis of I.Q. with twenty normals and the two groups were compared in this manner (see Table I), and twenty similarly matched pairs of brain-injured patients and neurotics were compared. Each of the above mentioned sub-groups of brain injuries was compared with a similar number of normals, matched as above on the basis of I.Q. By so doing it was felt that it would be safe to conclude that any possible discrepancy in results would not be caused by the difference in I.Q.

It was impossible to match the various groups and sub-groups according to age as well as I.Q. Yet consideration had to be given to the difference in age level of the brain-injury, neurotic, and normal groups.

A correlation between age and test score was made for all the normals tested (total number 55). Though it was found that there was a tendency for the high scores to be made by the younger subjects, the relationship was only .106; and as the probable error was .094, it could be concluded that there was no reliable relationship.

There yet remained to be considered the numerous occupational differences between the various subjects, more particularly the higher level of education, generally noted in the normals when compared with the brain-

A COMPARISON OF DIFFERENCES BETWEEN A GROUP OF BRAIN-INJURED PATIENTS AND NORMALS WITH RESPECT TO NUMBER OF RESPONSES ON SHAW BLOCK TEST TABLE I

Matched   I.Q. Age Occupation   Ro				NORMAL SUBJECTS	
93 28 Barber 111 32 H. S. entran 115 37 Office work 117 29 Stock-keepen 118 28 Buffer 119 31 Letter carrie 120 33 F. Lieut R. C. A. 120 25 III year High 122 31 Mineralogist 122 30 Office worke 122 34 II year High 124 27 Post office c/ 125 32 Artist 127 27 Mechanic 137 27 Mechanic 137 27 Mechanic 134 25 III year High	No. of Responses	1.0.	Age	Occupation	No. of Responses
111 32 H. S. entran 115 37 Office work 117 29 Buffer 118 28 Buffer 119 31 Letter carrie 120 35 FI. Lieut R.( 120 25 III year Hig 122 31 Mineralogist 122 34 II year High 124 27 Post office worke 125 32 Artist 127 27 Mechanic 137 27 Mechanic 138 25 Student High	1	93	22	Hosp. orderly	89
115 37 Office work 117 29 Stock-keeper 118 28 Buffer 119 31 Letter carrie 120 38 F.I. Lieut R.C.A.1 120 25 III year High 122 31 Mineralogist 122 34 II year High 124 27 Post office cl 125 32 Salesman 126 22 Artist 127 27 Mechanic 137 29 Sudenic	9	111	24	Student	6
117 29 Stock-keeper 118 28 Buffer arie 120 30 Ft. Lieut R.C.A. 120 25 III year High 122 31 Mineralogist 122 34 Machine-tes 122 34 Mineralogist 124 27 Post office worker 125 27 Arisist 127 27 Mechanic 134 25 III year High 127 27 Mechanic 134 25 III year High 137 29 Salesman 126 22 Arisist 134 25 III year High 134 25 III year High	7	115	30	Hosp. orderly	9
118 28 Buffer arrie 119 30 Letter carrie 120 30 Fl. Lieut R.() 120 25 III year High 122 31 Machine-tes 122 30 Office worker 124 27 Post office of 125 32 Arrist 127 Mechanic 132 29 Student High 132 29 Student High 134 25 III year High 137 27 Mechanic 134 25 III war High 134 25 III war High 135 29 Student 137 Student 137 Student 134 25 III war High	ಣ	118	45	Hosp, orderly	2
119 31 Letter carrie 120 33 F. Lieut R.(120 33 P.O. R.C.A.) 120 25 III year High 122 31 Mineralogist 122 34 II year High 124 27 Post office cl 125 32 Artist 126 22 Artist 127 27 Mechanic 137 27 Mechanic 134 25 III year High	9	118	21	Student	2
120 38 F.I. Lieut R.( 120 25 III year High 120 25 III year High 122 31 Mineralogist 122 34 Office worke 122 34 II year High 124 27 Post office of 125 32 Artist 127 27 Mechanic 137 29 Salesman 127 27 Mechanic 134 25 III year High	1	119	19	Student	12
120 33 P.O. R.C.A.I. 120 25 III year Hig 120 25 Machine test 122 31 Mineralogists 122 34 II year High 124 27 Post office of 125 32 Artist 127 27 Mechanic 132 29 Student 134 25 III year High 127 27 Mechanic 137 229 Student 134 25 III year High 137 29 Student 127 27 Mechanic 134 25 III year High 134 25 III year High 135 29 Student 127 27 Mechanic 134 25 III year High 134 25 III year High 135 29 Student 135 25	10	119	21	Student	12
122 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	4	120	27	Engineer	4
122 122 122 123 124 125 126 127 127 127 127 127 127 127 127 127 127	10	120	20	Student	ಣ
122 122 122 123 126 127 127 127 127 127 127 127 127 127 127	90	120	25	Student	12
122 123 124 126 127 127 127 127 127 127 127 127 127 127	90	122	19	Student	16
122 124 125 126 127 127 137 137 137 137 137 137 137 137 137 13	20	122	23	Reporter	12
124 125 126 127 137 132 132 29	1	122	32	Student	9
125 126 127 127 132 134 25	90	124	24	Lawyer	14
126 127 132 29 134 25	2	125	19	Student	12
127 27 132 29 134 25	14	126	23	Engineer	14
132 29	2	127	24	Student	15
134 25	15	132	25	Accountant	12
	10	133	24	Student	14
136 32	9	136	19	Student	10
Mean 121.15 29.35	5.85	121.1	24.25		9.8

injured patients. Could this in part explain any differences which might be found among the various groups and sub-groups?

Goldstein, Golb, and Weigle point out that the lack of the ability for abstract behaviour has nothing to do with education. Poorly educated people are often inclined to react in a more concrete way, they admit, "but it is always possible for them to react in an abstract way as well," they continue. "The evidence that education has nothing to do with impairment of the abstract attitude is further substantiated," they say, "by the fact that in brain-injury patients who showed a defect in abstract behaviour very clearly, there was no doubt as to the high level of scholastic attainment."

Accordingly—having ruled out all other apparent possibilities—I concluded that any possible differences in score among groups tested could be attributed to impairment of abstract attitude.

## RESULTS AND INTERPRETATION

The quantitative score which may be derived from the test performance consists of the number of responses given, i.e. the number of sequences in which the subject arranges the blocks. The mean number of responses given by the group of brain-injured patients is 5.85, whereas the mean number of responses given by the matched group of normal subjects is 9.8. Although the difference between the means of the two groups is only 3.95, this is statistically significant. The ratio of the difference to the standard error of the difference is 4.44, well above the usual requirement of 3.0.

Referring again to Table I, it may be noted that only two of the braininjured patients give more than eight responses, whereas considerably less than half of the normal subjects give as few responses as that. Thus, although the test does not give a complete differentiation between the two groups, especially in the lower ranges of I.Q. included, there is nevertheless a consistent tendency for the brain-injured patients to give fewer responses than normals of equivalent I.Q.

TABLE II
COMPARATIVE SUMMARY OF DIFFERENCES BETWEEN GROUPS WITH RESPECT TO NUMBERS OF RESPONSES ON SHAW BLOCK TEST

Matched Pairs	Groups Compared	D	$\frac{D}{S.E.D.}$
20	Brain Injuries and Normals	3.95	4.44
20	Brain Injuries and Neurotics	2.1	2.28
20 15 10	Neurotics and Normals	1.46	1.35
10	Slight Impairment and Normals	3.7	3.14
10	Slight Impairment and Neurotics	2.4	2.42
10	Slight Impairment and No Impairment	4.6	3.83
10	Severe Impairment and Neurotics	2.9	1.97
10	Neurotics and No Impairment	2.3	1.5
10	Normals and No Impairment	.1	.09

Other comparisons are shown in Table II (p. 130). It may be seen that even when the impairment detected by other clinical psychological techniques is described as "slight," the difference between these cases and a matched group of normals is 3.7, and statistically significant. However, those patients who have suffered brain-injury but who could not be detected by other psychological techniques as manifesting impairment cannot be differentiated from normal subjects on the basis of the Shaw Block Test. showing a difference of only .1 from the mean of the normal group. This finding is confirmed by the fact that there is a significant difference between cases of "no impairment" and cases of "slight impairment." Indeed the difference is even greater than that between "normals" and "no impairment," although this is undoubtedly an artifact, and due to the slightly different groupings of subjects in order to get matched pairs. This series of comparisons thus indicates that the Shaw Block Test is performing a similar function to other psychology techniques in identifying those subjects in whom intellectual impairment has resulted from brain-injury.

In terms of performance on the Shaw Block Test the neurotic subjects seem to be intermediate between the brain-injured subjects and normal subjects. Although the differences are not statistically reliable with this number of subjects, the fact that neurotics are found to give fewer responses than normals and brain-injured patients without signs of clinical impairment, and more responses than brain-injured cases as a whole, and "slight impairment" and "severe impairment" cases in particular, shows a trend in a consistent direction. Insofar as the Shaw Block Test measures impairment in abstract thought, neurotic subjects seem to show some deterioration in ability, even though this is not as marked as in the case of brain-injured subjects, and perhaps not marked enough to be reliably differentiated in the individual case.

One would have expected the cases of "severe impairment" to be differentiated more clearly from normal subjects. However, in Table II it may be seen that they are compared only with neurotic subjects, and although the mean of the group was lower by 2.9 points than the mean of a matched group of neurotics, this difference is too small to be statistically reliable. The reason that "severe impairment" cases were not matched with normals was because the cases of severe impairment were generally of a much lower level of I.Q. than the normals used. Therefore it was only possible to match with neurotic subjects of low I.Q.'s. Since the difference actually obtained was much smaller than one would expect considering the degree of impairment implied by the adjective "severe," there seems a suggestion that a low I.Q. in itself carries with it an implication of inferiority in abstract thought. Thus, it would seem that the Shaw Block Test promises to be useful as a criterion of impairment only with cases of above-normal intelligence, cases in which the general level of intelligence is high enough

to lead one to expect a corresponding high level of abstract thought, unless this has been differentially affected by the injury as Goldstein's findings would lead one to expect, and as seems to be confirmed by the results of this study.

Some attempt was made to assess the qualitative performance of braininjured patients on the Shaw Block Test. For example, Goldstein and Golb pointed out that a characteristic of brain-injured patients is to fail to assume the "categorical attitude," which in terms of our test, would be to view the experimental objects as separate entities, rather than as bearers of certain general characteristics, such as colour, weight and shape. The brain-injured subjects were frequently observed to segregate two blocks because of similar characteristics, and leave the other two out of consideration. An even more pronounced example of failure to assume the "categorical attitude" occurred when a subject would, for example, separate "the whale" from the other three animal names, because the whale is the only one living in the water.

Frequently subjects were observed to grasp the possibilities of abstraction, realizing that similar characteristics were possessed by the blocks, without carrying it through to a realization that the characteristics were at the same time different. For instance, the subject might say "they are all animals" or "they all have holes," or perhaps notice the notches, thus showing some indication of the abstract attitude, and yet not be able to grade the blocks according to progression with respect to the common characteristic noted.

Goldstein points out that the most concrete way of dealing with situations or things is to react to one aspect of them exclusively. This was illustrated in our test by subjects whose responses were all in the animal category or were all restricted to one side of the block. Accordingly an attempt to discern possible distinctions of this nature was made by recording the number of animal responses and by recording whether or not the subject reversed the blocks. It appeared that in both cases the braininjured subjects reacted generally in these more concrete types of approach; but this impression should be confirmed by further investigation.

#### CONCLUSION

The results of this research indicate that there is a significant difference in the manner in which brain-injured patients and normal individuals deal with the problem presented to them in this test. We have seen that the difference cannot be attributed to age, I.Q., or occupation; it must therefore be the result of impairment resulting from brain injury. Goldstein has put forth fairly conclusive evidence that brain-injured patients are not impaired in a specific function, but rather in a general over-all ability to assume the abstract attitude. They have become limited to the concrete

we be

approach and are handicapped if they have to perform or shift by an act of conscious volition. In the light of Goldstein's findings, and in the light of our results, it seems to be indicated that the Shaw Block Test is a valid test for discovering impairment of the Abstract Attitude.

It is not to be concluded from these results that anyone in whom this test reveals evidence of impairment in the abstract can be assumed to have suffered a brain injury. Vigotsky, (a Russian psychiatrist) following the same line of investigation as Goldstein, came to similar conclusions regarding the cases of schizophrenia. He stated that in schizophrenia the most important deterioration in thought was an impairment in function of concept-formation. Thus Vigotsky's findings limit the effectiveness of our test as a diagnostic technique for brain-injury cases. It seems safe to conclude, however, that our test enables the examiner to determine whether a patient known to have suffered a brain injury can or cannot assume the abstract attitude. Insofar as the patient is unable to assume the abstract attitude which might be expected from one of his general level of intelligence, the patient may be said to be intellectually impaired. The test might be said to disclose the type of impairment rather than measure the degree of impairment. It is believed that it can be used as an effective supplement to other tests such as the Bellevue-Wechsler and Rorschach, which are used to give indications of the presence of intellectual impairment, and can confirm and to some extent expand the findings obtained by these other instruments

## RESEARCH FELLOWSHIP ANNOUNCEMENT

PRINCETON, N.J., September 14th. The Educational Testing Service, Princeton, N.J., is offering for 1949-50 its second series of research fellowships in psychometrics leading to the Ph.D. degree at Princeton University. Open to men who are acceptable to the Graduate School of the University, the two fellowships carry a stipend of \$2,200 a year and are normally renewable.

Fellows will be engaged in part-time research in the general area of psychological measurement at the offices of the Educational Testing Service and will, in addition, carry a normal programme of studies in the Graduate School. Competence in mathematics and psychology is a prerequisite for obtaining these fellowships. Applications for 1949-50, together with supporting material, must be received in Princeton not later than January 15th, 1949. Information and application blanks may be obtained from: Director of Psychometric Fellowship Program, Educational Testing Service, Box 592, Princeton, N.J.

## THE EDUCATIONAL TESTING SERVICE: A NEW FORCE IN MEASUREMENT

Six months old on July first, 1948, the Educational Testing Service celebrated that fact by acquiring a five-story office building in Princeton, New Jersey, to serve as headquarters for its many and far-flung activities. Area offices will be maintained in New York City, Chicago, and Berkeley, California, and in other regions as need arises.

Although its name may as yet be unfamiliar, the activities of the Educational Testing Service (ETS) are well known to educators in schools and colleges throughout the western hemisphere. The result of a merger on January 1, the ETS now performs all testing projects of the American Council on Education and the College Entrance Examination Board, and it has taken over the Graduate Record Office of the Carnegie Foundation for the Advancement of Teaching. The ETS is a non-profit, non-stock corporation without members.

Organization problems that by themselves have been a full-time job, coupled with a policy of gradualism is introducing changes in the adopted projects, have meant that the first six months of the ETS were a time of reflection, survey, and coordination of the several agencies which, hitherto, had functioned independently. A glance at the catalog of the new agency hints at the immense scope involved in the merger; there are tests available at levels from seventh grade through graduate school, some for sale, some for rental, and some for administration in programmes supervised by the ETS.

At the high school-to-college level there are these supervised programmes: the College Entrance Examination Board examinations, the English Examination for Foreign Students, Entrance Examinations for the United States Coast Guard Academy, United States Merchant Marine Academy, United States Military Academy, and United States Naval Academy, the Navy College Aptitude Test, Pensacola Scholarship Test, Pre-Engineering Inventory, and Special Aptitude Test for Veterans. Tests for sale to qualified users include the numerous Cooperative Achievement Tests (formerly published by the Cooperative Test Service) and the ACE Psychological Examinations: tests for sale or rental are the USAFI Achievement Tests and Tests of General Educational Development. College-to-graduate school is the level for these supervised programmes: Engineering Achievement Test, Preliminary Actuarial Examinations, Graduate Record Examination, Law School Admission Test, and Medical College Admission Test; and again, the Cooperative Achievement Tests are for sale and the USAFI tests for sale or rental. Examination programmes in professional fields include those for the Foreign Service of the United States Department of State and the National Teacher Examination, which is given to prospective teachers.

At first glance such a list might seem to reflect a scattering of energies. This is not so. There is a high degree of uniformity of purpose and function between the various projects. ETS tests have in common that they all measure mental abilities or achievement, that all are constructed by experts in their respective fields working with test technicians, and that all are, in whole or in part, objective in form. Already the interchange of ideas and experience among the personnel of various divisions has had demonstrable results in the planning of new tests and test items, and when the geographical union in the Princeton headquarters is accomplished, in 1949, the merging of ideas should noticeably accelerate.

Beyond the construction and sale of tests and the administration of its present programmes, however, the group has a busy agenda; it hopes to push back frontiers of hitherto unexplored areas of the mind and of personality, to conduct basic research on testing technique, and to experiment with new ways of using and coordinating existing tests, both its own and

those of other groups.

A unique organization, as this recital inevitably implies, the ETS was long in the planning. A need for some central agency to unify the scattered projects which dotted the testing field was widely felt as long as ten years ago; but it was not until October, 1946 that an independent Committee on Testing, appointed by the Carnegie Foundation, and headed by President Conant of Harvard, first drew up concrete plans for such a group. This Committee recommended the creation of a single testing agency, within which the testing functions of three leading non-profit agencies (ACE, CEEB, and GRO) could be continued under a single aegis, and which, through a pooling of talent, experience, and assets, might sponsor tests, testing programmes, and research superior to those which any of the merging groups singly might produce. Both the ACE and the CEEB continue as independent organizations, performing their respective valuable functions in education; the change simply means that a highly technical professional service—testing—is now done for them by a professional agency.

An agreement was reached in December of last year, whereby the CEEB and the ACE each transferred to the ETS their testing activities, together with one half of their accumulated reserve funds, and the Carnegie Corporation transferred the activities of the GRO and made to the ETS a capital grant of \$750,000. The total assets of the new organization came to about \$1,400,000. With formal operations starting on the first day of this year, the policies of the ETS have been determined by a Board of Trustees appointed shortly before that time, while its operations have been carried out under the supervision of three professional committees—one on Finance, one on Research, and one on Tests and Measurements—each composed of persons outstanding in their respective fields.

Princeton, N. J.

### PROFESSOR CHESTER E. KELLOGG

Chester E. Kellogg, Professor and former Chairman of the Department of Psychology, McGill University, died at his home in St. Lambert, Quebec, on July 2nd, 1948.

To the members of the Canadian Psychological Association, Dr. Kellogg is, perhaps, best known as Honorary President of the Canadian Psychological Association for the year 1946-47. Those members who contributed to the development of the "M" test will long remember his statistical contribution to the development of this military measuring device. His colleagues and former students cherish memories of the sound inspiration and the professional insight which contributed to the development of such men as MacLeod, Spence, Estall, Morton, Norris, and Bois, among those of his students who are well known to Canadian Psychological Association members.

Dr. Kellogg, a graduate of Bowdoin, obtained his Ph.D. at Harvard shortly before entering the American Army in 1917. Here, he contributed to the development of the psychological testing service in the period which saw the initiation of all group testing. He, himself, was most directly concerned with the creation of the Army Beta. Coming to Canada after the war, he was Professor of Psychology and Education at Acadia until he accepted an appointment in 1923 as Associate Professor of Psychology at McGill University. Here, he put his definite impress on the Department and on successive generations of students. Far from being robust and strong, he nevertheless undertook the arduous task of Chairman of the Department in 1944 when the teaching staff was reduced by war and the teaching load increased. Two years later, when his health had worsened, he turned over the direction of the Department to his former student, R. B. MacLeod, but continued to teach and to be available for advice and consultation. Shortly before his death he had been granted leave of absence for the year 1948.

His publications dealt with education, test construction—particularly with tests suitable for the examination of illiterates,—and statistical methodology. The Revised Beta Examination, developed in collaboration with N. W. Morton, has been widely used in the United States and Canada.

His contribution to Canadian psychology, in his personal contacts and stimulus to others, went far beyond the concrete evidence of the written word. His death represents a loss both to McGill University and to the Canadian Psychological Association.

### NOTE1

## A CORRECTION FOR THURSTONE'S MULTIPLE FACTOR ANALYSIS

## CHESTER E. KELLOGG McGill University

In checking through the argument of Thurstone's new volume, I have encountered a contradictory passage, one which may easily pass unnoticed, but, if noticed, is liable to cause some confusion, so that it seems worth while to supply the correction. As the difficulty is not in the theory, but due to clerical errors in the illustrative material, no attempt will be made to make this note intelligible without reference to the text.

First, then, the reference near the bottom of page 453, and again at the bottom of page 455, should be to formula (29) instead of (36). After making this correction one naturally turns to an inspection of Table 8, purporting to present data resulting from use of the formula. It thus becomes apparent that whoever did these calculations inadvertently employed covariances from the first column of Table 6 in place of the correlations from Table 3. Accordingly, lines 4 to 7, and 10 in Table 8, need to be corrected to read as follows:

4)	.700	.350	.123	.078	.622	.922	.675
4) 5)	.700	. 606	.367	. 235	. 465	.765	.608
6)	.700	.350	.123	.078	.622	.922	.675
6) 7)	.700	.606	.367	. 235	.465	.765	.608
10)	.700	.404	.163	.104	. 596	.896	.665

The reduction in the communalities is thus considerably greater than indicated in the text.

Discovery of this fact naturally leads to a scrutiny of the factors listed in Tables 4 and 9. A glance shows that the figures for variables 1 and 10 run higher in Table 9 than in Table 4, the reverse of the proper relationship. Calculation then reveals that all the variables in Table 9 have communalities close to .700, while those of Table 4 are: .441, .696, .698, .683, .641, .680, .650, .700, .699, .667, too low in comparison with Table 8, but, in case of variables 4 to 7, too high to fit the correct values. Of that later. The immediate point is that the two sets of factors have evidently been interchanged in making up copy for this chapter.

The next item to be considered is the relation between the factors and the diagram, Figure 4. Extending the vectors to unit projection on the first axis yields the following figures:

<sup>1</sup>This Note was mailed to the Editors by Dr. Kellogg on June 22, shortly before his death.

TABLE 4 EXTENDED

	1	II	III
1	1.00	-1.02	2.06
2	44	4.16	.087
3	44	780	875
4	44	.725	. 505
2 3 4 5	6.6	.205	.982
6	44	840	.266
6	4.4	910	. 454
8	44	069	521
9	44	. 453	264
10	44	029	.058

### TABLE 9 EXTENDED

	I	II	III
1	1.00	-1.02	2.06
2	44	1.16	.088
3	44	783	872
2 3 4 5 6 7	44	. 595	. 605
5	66	.041	1.105
6	66	845	105
7	4.6	.905	.641
8	4.6	069	523
9	64	. 454	264
10	66	092	.184

Plotting the II and III columns reproduces Figure 4, except that axis II should run below points 10b and 2. The a points come from Table 9, b points from Table 4, as expected in view of the interchange of the tables.

Accepting Table 4 as a fair approximation to the new factor matrix, one might well consider the theory demonstrated, and stop at this point. But, having gone so far, it seemed of interest to discover the actual results of more precise calculations, so I have worked out the centroid factor weights for both correlation matrices, as follows:

		Fo		
	I	II	III	h2
1	. 483	144	. 666	.698
2	.483	. 650	212	.701
3	. 483	507	455	.697
2 3 4 5	.660	. 492	.151	.701
5	. 660	. 203	.472	.700
6	.660	514	061	.703
7	.660	378	.350	.702
8	.660	116	502	.701
9	.660	.308	412	.701
10	.836	.000	.000	.699
		Fs		
	I	II	III	$h^2$
1	.329	106	.578	.455
2	.517	. 633	176	.699
3	.517	530	388	.699
4	. 625	.522	. 166	.676
5	.596	.266	.428	.609
6	.625	529	073	.675
7	. 596	399	. 308	.609
8	.707	143	424	.699
9	.707	. 283	347	.701
10	.816	.005	018	.665

Extending the vectors as before, we have:

		FO EXTEND	DED
	I	II	III
1	1.00	298	1.38
2	64	1.345	438
3	44	-1.05	942
3 4 5 6 7	4.4	.745	.227
5	4.6	.307	.715
6	66	779	092
7	44	573	.530
8	44	176	760
9	44	.467	624
10	4.6	.000	.000
		Fs Extent	DED
	I	II	III
1	1.00	322	1.76
2	64	1.25	340
3	4.4	-1.02	752
4	64	.835	. 185
5	44	.445	.720
6	44	846	117
6	64	669	.515
8	44	202	600
9	4.6	.400	491
10	4.6	.006	022

Owing to the shift in the position of the first centroid axis and the corresponding change in the projecting plane, the above figures will not plot into a single triangle as do Thurstone's tables. It would be necessary to rotate the factors before extension to secure this result. Fo gives an equilateral triangle, Fs an isosceles, narrower and taller. The basic spherical triangle is of course unaltered. (Thurstone does not mention this point, nor indicate what factoring method he used.) Plotting the two triangles, the same relations appear as in the single diagram of the text. The crucial vectors move radially away from that of variable 1. The theory is thus doubly confirmed.

## ETHICS AS PSYCHOLOGY RATHER THAN PHILOSOPHY<sup>1</sup>

## BARNETT SAVERY University of British Columbia

My fellow philosophers may believe that I am about to betray the fair name of philosophy by advocating that ethics is a psychological subject. But if this be betrayal, it cannot be a very great sin, because I am not, for the present, arguing that ethics should be studied and taught by the psychologist rather than by the philosopher. As a matter of fact, modern psychological theories and teachings have so far upset conventional and orthodox practices that the psychologist would much prefer that the philosopher help bear the brunt of the disturbed orthodoxies, and for a while longer keep ethics as one of the fields for philosophical study. Yet, in view of the facts, we submit that ethics is psychological in nature.

Tradition argues that science describes what takes place, and explains, in terms of causes, how things take place: accordingly, it will be seen that ethics is a philosophical subject, because rather than describing how things take place, its task is to indicate what things ought to take place. And the Good is what ought to be, and the study of the nature of the Good is a philosophical problem, hence not a scientific problem, and obviously, then, not a psychological problem. It is this thesis that we are attacking. And we propose to show that the meaning of the Good, when we pare away the ambiguities, vagaries, and downright fictions, becomes a meaning that has significance in psychological terms only. Our main thesis will be that the problem is not "What is the Good?" nor, "What is it that ought to be?" but rather, "What kind of a world do I desire to live in?" or better, "What kind of a world would I desire to live in, if I knew enough about myself and the world about me?" Further, we shall attempt to show that the nature of "moral goodness," with the implications of moral responsibility and freewill, disappears as a traditional philosophical problem when we accept what we believe to be a correct analysis of the psychological situation, a situation involving the nature of "freedom," and desire as a causal factor in human behaviour.

Our first task is to show the sense in which "The Good" has significant meaning in psychological terms only.

From the time of Plato to the present most philosophers have attempted to show that goodness has absolute meaning, that there is but one and only one correct meaning for goodness. The absolutist realizes that there are differences of opinion with respect to the correct meaning of goodness, but he fails to realize that goodness may have relative meaning, relative in the sense that there are no grounds for arguing that some one meaning for good-

<sup>1</sup>Read at the Spring Session, 1948, of the British Columbia Academy of Sciences.

ness can be validated to the exclusion of all others. This failure leads to the following type of reasoning:

There are, let us assume, three meanings for goodness under consideration: meaning A, which is being defended; and meanings B and C, which are being criticized. It is relatively easy to demonstrate that neither meaning B nor meaning C can be substantiated in such a way that either can be validated to the exclusion of all other meanings. It is concluded, therefore, that meaning A is the correct meaning for goodness. Such reasoning is logically so fallacious that one refrains from commenting. I suppose that there will always be a desire to discover a single valid ethical standard, because its discovery will allow us to make valid ethical judgments that are universal in scope, Given this predilection, and given the emotional gullibility of man, it is easy to see why any given philosopher will attempt the annunciation of some meaning of goodness as the absolutely valid one. But is it not strange that practically every time such an absolute is annunciated it turns out to be either the particular standard that is accepted by the cultural epoch of the philosopher, or a code that the particular philosopher wishes the people of his culture to adopt? Psychologically it is understandable that people desire to be morally smug and to say, "Either you accept my moral code, or you are a moral imbecile." Recent anthropological studies reveal, we believe, that it is time to rid ourselves of moral immaturity and to recognize that ethical standards are relative to time, place, knowledge, and emotional bias.

Plato has told us that the meaning of the Good is to be discovered at the apex of the realm of ideas; Aristotle says it is self-realization; Epicurus says it is pleasure; Christians tend to say that it is the essence of God or that towards which God directs His will; Spinoza says it is any object of desire; others say it is what is revealed by conscience or ethical intuition; Kant called it the Good-will acting through the categorical imperative (which was his pedantic way of saying that it is the principle of consistency).

More recently we are told that it is the object of a unique, unanalyzable, ethical feeling that we all have, and its name is the "ought." And to cap the climax we have the view that goodness is a unique, unanalyzable quality that drifts about the universe, attaching itself now here, and now there, the hereness and the thereness depending, I am afraid, on the special biases of the upholders of such a fantasy. No wonder that the recent school of logical positivists has dismissed the problem at the snap of the finger by saying that it is meaningless—sheer logical nonsense.

But why not come to a most simple and obvious conclusion and argue that there are, at least in theory, many possible standards in terms of which we can evaluate things. It is not that one is right and another wrong, one correct and another incorrect; it is simply that people vary, have different desires, different cultural biases, different ways of responding to different stimuli.

What, then, are we to do in this chaotic world of conflicting standards? In theory the answer is relatively simple. As we suggested, the question is not "What is the Good?" nor "What ought to be?" but "What do I really desire?"—that is "What would I desire if I knew enough about myself and the world in which I live?" Most people, we believe, desire to live; they desire to live together; they desire to find as much happiness in the world as possible. The practical ethical task, then, is to construct a world where the satisfaction of these desires is a possibility.

And why, you may ask, should we be concerned about the well-being of the majority? In the final analysis, it rests, as does the acceptance of any moral code, upon a bias, and the Lord help those who in the long run reject that bias. May they get lost in the struggle, and quickly! Thrasymakus was badly maligned by Plato.

Since the real ethical problem is to discover what our desires are, and what our desires would be if we knew enough about ourselves and the world in which we live, and since the psychologist is interested in investigating the desires of men, and is interested in investigating what the desires of men would be under varying stimuli, does it not follow, then, that the study of ethics is a psychological problem?

We are aware of the fact that people will continue to search for absolute standards in the field of ethics, and we must admit that there is a logical possibility that some day some one may discover an absolute. But in view of the known facts, no one can demonstrate the validity of any one ethical standard to the exclusion of all others. And, since it is in keeping with scientific method not to believe in the absence of evidence, why, then, not admit that standards are relative, recognize our biases, and get on with the job of making this a more democratic world? And what if it is a bias? We share it with the majority of people—in that perhaps, even our absolutists can find emotional comfort.

The nature of moral goodness, is, in part, related to the meaning of goodness as discussed above, and, in part, needs additional analysis. It is pretty well agreed that moral goodness has meaning in terms of one's intention to do that which is good. If we accept the relativistic approach, as we have suggested, it does not follow that every person who is morally good is a person whom we should desire to have in our community. His conception of the Good may be quite antithetical to ours, and though morally good by his own lights, he might be vicious by ours.

But what we are mainly concerned with here is the analysis of the morally good in terms of one's intention to do good. Intention, it is agreed, is a voluntary desire. A voluntary desire is one in which there is no compulsion. A desire in which there is no compulsion is one in which there is what has been called freedom. And concerning the analysis of freedom, and moral responsibility, which is the responsibility of a voluntary agent, there

has been, in philosophical literature, a considerable amount of unenlightened and faulty analysis.

The problem usually appears in one of three forms: determinism, indeterminism, and "free-will," the last being an attempt to solve the dilemma of the first two. The determinist argues that our behaviour is the result of causes, our desires come into being as a result of causes, and it is because of this that we can hold people responsible for their acts. If our desires were not caused, then our voluntary acts would be uncaused, and it would be silly to hold people responsible for acts that occur by chance.

The indeterminist argues that if determinism is true, then no one can ever have a "real choice," because if everything is caused then our desires are caused, and we are victims of heredity and environment, and can never act in any way other than that in which we do. We are caught in the stream of causal events in which voluntary acts are sheer myth. And if voluntary acts are sheer myth, if we have no choice in behaviour, then there can be no moral responsibility; hence it must be indeterminism that is true, and freedom and moral responsibility are saved.

The "free-will" advocate attempts by a bit of word-juggling to save the situation by arguing that our wills are inclined by causes, but in the final analysis our wills are free and we make our own voluntary decisions, arising above the force of the inclinations forced upon us by causes. To my mind this is sheer sophistry. Either our desires are caused or they are not. If our desires are caused we have determinism; if they are not caused, we have indeterminism. And we are convinced that moral responsibility loses its meaning if our so-called voluntary acts occur by sheer chance. Under the banner of determinism, then, a new analysis must be made.

Our thesis is that freedom, in the sense that we could have behaved differently than we did behave, if only we had so desired, is a conclusion unwarranted by the facts. After we have made a choice, and acted, it is of course impossible to return to the original state and start over again. But I hazard the guess that if we could return, without being affected in any way by the original choice, then, the causes being identical, we should, being competent scientists, expect the same results. Freedom has a real practical meaning for all of us, and, interestingly, it is a meaning that accepts causal efficacy as a characteristic of human behaviour. Very simply, it is just this: stated negatively, we are free when we are not restrained from acting in accordance with our desires, and it does not matter one iota whether our ideas come from the "blue," or are caused; stated positively, freedom means that we are living in a world where our desires are efficacious, where there is a probability for the satisfaction of those ideas. The desire for freedom for men is really nothing but the desire to have a minimum amount of restraint, the wish to live in a world where our desires can be satisfied, to live in a world where we can make up our minds and have the minimum amount of compulsion compatible with the maximum satisfaction of desires.

And can there be moral responsibility in a world where human behaviour is caused? We believe that it is only possible in a deterministic world where moral responsibility has sensible and practical meaning, but we must revise the vague and "guilt-flavoured" concept of tradition.

For us, a being is morally responsible if he is susceptible to praise or blame, whether he is two months old or 100 years old. If we could control the throw of dice by praise or blame, dice would become moral agents; but in spite of the so-called results of Dr. Rhine, I should hesitate to speak of any inanimate object as responding to moral incentive. And of course the amount of praise or blame to be given, and when it is to be given, and how often, and by whom, is a problem for the competent psychologist to answer, not the philosopher.

It has been argued that this analysis of moral responsibility may have dangerous consequences, because an individual will say, "Well, if I am not really responsible for my acts, if all my acts are caused, if I really am a victim of heredity and environment, then I will always do as I like, and be just as selfish and ruthless as I please." But unless that person is a psychopathic individual, he will know that he will be blamed whenever he steps on too many toes, and if he *is* psychopathic he will do just as he pleases anyway.

It is interesting to note that our concept has been applied to scores of individuals in a course in psychotherapy. And it has been interesting to observe how psychoneurotics suffering from guilt feeling become vastly improved when they realize that moral responsibility has valid meaning only in a world of causes and effects.

We believe that it follows from our analysis of moral goodness and its connection with the Good, and its connection with freedom and responsibility, that again we have a problem in the field of ethics that is purely psychological in nature, and philosophical only by courtesy of historical context.

In summing up, we have attempted to show that two of the main problems of ethics are really psychological problems. Rather than searching for the elusive "Good," we should search for the kind of world in which we want to live, taking into consideration all the relevant facts. And if we want to be morally good, we will attempt to bring that world into effect, realizing that if we are to be morally good we must be susceptible to praise and blame, and that most of us, most of the time, want to live in a world where there is a maximum amount of "freedom," and that that is a world where compulsion is at the minimum and absence of restraint is at the maximum, and all this adds up to a world in which our desires may find satisfaction.

# PROCEEDINGS OF THE SEVENTH ANNUAL MEETING OF THE CANADIAN PSYCHOLOGICAL ASSOCIATION

Winnipeg, May 27, 28, and 29, 1948

ON Wednesday, May 26, the day prior to the annual meeting, a combined session of the Eastern and Western sections of the Research Planning Committee was attended by members from all parts of Canada. The Council of the Canadian Psychological Association met that evening and again, briefly, the following morning.

The 1948 annual meeting of the Canadian Psychological Association was held at the Fort Garry Hotel in Winnipeg on May 27-29. There were 107 persons registered. The opening session was held on the morning of Thursday, May 27, and took the form of a preliminary business meeting at which the chairmen of standing committees tabled their reports and spoke briefly of the recommendations which would be proposed to the meeting at a later session. Copies of the reports of the Committees on Research Planning, Certification, and Publications, and copies of the Secretary-Treasurer's report were distributed to members at this session in order that there would be ample opportunity for individual study and informal discussion of the problems to be considered at the main business session.

The sessions on Thursday afternoon and evening, and on Friday morning, were devoted to the presentation of papers. The following is a list of the papers read at these sessions: K. S. Bernhardt, Toronto, "The Effect of Enriched Vitamin B Diet on Children"; W. D. Blake, Lewisburg, Pa., "The Non-Financial Incentives in Industry"; J. S. A. Bois, Montreal, "General Semantics in Psychological Practice"; E. A. Bott, Toronto, "Should Psychology Accept the Philosophical Problem of Relations?"; B. H. Holdsworth, Toronto, "Psychology and the Business World"; Andrew Moore, Winnipeg, "The Reliability of the Scoring of Certain Grade XI Examination Papers"; J. E. Morsh, Vancouver, "Changing Teachers' Attitudes"; B. R. Philip, Kingston, "Recall and Recognition of Nonsense Syllables"; Mary D. Salter, Toronto, "The Role of the Clinical Psychologist in Canada."

Friday afternoon was devoted to a panel discussion on "Student Counselling" with D. C. Wiliams, University of Manitoba, as the Chairman. W. H. D. Vernon of Acadia University and Mary D. Salter of the University of Toronto described developments in student counselling at their respective universities. As guest speaker on the panel, H. Wilkes Wright described the long-established and extensive services of the General Counselling Bureau at the University of Minnesota. R. B. Liddy of the University of Western Ontario and R. B. MacLeod of McGill University raised for discussion certain of the difficulties encountered in this area of work. After

discussion by members of the panel, the subject was thrown open to debate from the floor.

The President's Dinner was held on Friday evening. The Address of the President appears elsewhere in this issue of the JOURNAL. Following the Address, there was a showing of the documentary films The Feeling of Hostility and Let There Be Light.

Both morning and afternoon sessions on Saturday were devoted to the transaction of business and consideration of committee reports. At noon, members were taken by bus to the new campus of the University of Manitoba where they were welcomed by President Trueman and entertained at a luncheon given by the University.

The following business was transacted at the Saturday sessions of the annual meeting. The President, Professor S. N. F. Chant, Vancouver, presided.

#### 1. MINUTES

On motion, the minutes of the last annual meeting of the Association, as published in the *Proceedings* (Canadian Journal of Psychology, 1947, I, 2, 96-102), were taken as read.

### 2. REPORT OF SECRETARY-TREASURER

(a) Membership. The following report on the membership of the Association was presented:

Present Membership:	Total	Fees	Fees	in Arrears
(May 1, 1948)		Paid	1948	1947 & 1948
Fellows and Members	150	122	21	7
Associate Members	235	170	54	11
"Student Affiliates"*	88	38	50	Married .
		-	-	
TOTAL	473	330	125	18

(\*"Student Affiliates" have been accepted tentatively at an annual fee of \$3.00 pending formal establishment of such a class at this Annual Meeting.)

Growth:		nbership a the Annua		Paid-up	Total
First	Dec.	1940	Montreal	-	-
Second	May	1942	Toronto	80	-
Third	May	1944	Toronto	123	157
Fourth	May.	1945	Montreal	158	-
Fifth	May	1946	Kingston	201	261
Sixth	April	1947	Ottawa	220	330
Seventh	May	1948	Winnipeg	330	473

The net increase in total membership since the last Annual Meeting is 143 (43%). The increase in paid-up membership is 110 (50%).

### Geographical Distribution

In Canada		Outside Canada	
Alberta	50	U.S.A.	33
British Columbia	32	United Kingdom	6
Manitoba	46	Holland	1
New Brunswick	10	France	1
Nova Scotia	12	Africa	1
Ontario	201		-
P.E.I.	0		42
Quebec	70		_
Saskatchewan	10		
	431		

#### Occupational Distribution

Students in training University teaching Applied		128 121 199
— Educational — 79 — Clinical — 73 — Personnel — 47		
Unspecified	-	25
TOTAL —	-	473

In the discussion which followed presentation of these figures, attention was drawn to the fact that fees now in arrears amount to approximately \$600.00. A variety of suggestions were made by discussants: remove names from JOURNAL mailing list immediately; remove names after two "free" issues; include notice that the JOURNAL is being sent "with the compliments" of paid-up members; send more frequent reminders of fees due. It was moved and seconded that this matter be referred to the Publications Committee for action during the coming year. (Carried)

(b) Finances. The following report on the finances of the Association was presented:

#### Treasurer's Report for the Calendar Year 1947:

Receipts—Members' Fees (less exchange) Bulletin Reprints Journal—Subscriptions (net) —Advertising Annual Meeting	771.98 39.33 229.73 146.40 75.50	\$1,262.94
Expenses—Bulletin (final issue) Journal—Standard —Supplementary Stationery and Supplies Stamps and mailing Telephone and telegraph Secretarial assistance	155.11 450.00 148.33 140.23 100.82 49.71 40.00	\$1,084.20
Evess Receipts over Evnenses		\$ 178 74

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### 3. REPORT OF COUNCIL

(a) Election of Officers. The Secretary reported that the procedure for electing officers by mail vote had been continued this year with the following changes: the call for nominations was sent to Associates as well as Members, and nominations received were treated as a "primary" in the sense that only those names with the largest number of nominations were shown on the ballot. Ballots were mailed to 156 members and the number returned was 97 (62 per cent).

Elected by Council: Honorary President: R. B. Liddy, London.

Previously Elected: Past President: S. N. F. Chant, Vancouver; President: J. S. A. Bois, Montreal; Directors: J. D. Ketchum, Toronto (1947-1949); E. C. Webster, Montreal (1947-1949); D. E. Smith, Edmonton (1948-1950); Mary L. Northway, Toronto (1948-1950).

Newly Elected: President Elect: C. R. Myers, Toronto; Secretary-Treasurer: G. H. Turner, London; Directors: N. W Morton, Ottawa (1949-1951); W. E. Blatz, Toronto (1949-1951).

## (b) Recommendations.

Honorary Life Fellow: On recommendation of Council, it was moved and seconded that the following member be elected an Honorary Life Fellow of the Canadian Psychological Association: J. M. MacEachran, Edmonton.

(Carried)

Fellows: On recommendation of Council, it was moved and seconded that the following members be elected Fellows of the Canadian Psychological Association: H. W. Wright, Winnipeg, and W. Line, Toronto.

(Carried)

Honorary Life Member: On recommendation of Council, it was moved and seconded that the following member be elected an Honorary Life Member of the Canadian Psychological Association: Brother Luke, Montreal. (Carried) Members: On recommendation of Council, it was moved and seconded that the following associate members be elected members of the Canadian Psychological Association: A. Jean Brown, Toronto; F. R. Clarke, Montreal; W. Ethier, Montreal; W. R. Fraser, Montreal; M. F. Grapko, Toronto; J. C. Hewson, Vancouver; Esther Milner, Chicago; Elsie Stapleford, Toronto; H. L. Stein, Winnipeg; D. A. Stewart, Fredericton; and A. J. Tremblay, Quebec City. (Carried)

(c) Next Annual Meeting. On recommendation of Council, it was moved and seconded that the next annual meeting of the Association be held in Montreal on May 26, 27, and 28, 1949. (Carried)

## 4. Reports of Committees

(1) Committee on Membership—The report of the Membership Committee was presented by the Chairman, D. C. Williams. In its first year of operation the Committee had selected as its primary objective the recruitment of new members, particularly among students majoring in psychology. The efforts of the Committee had met with a substantial measure of success in that a total of 167 new members had been added during the year.

One result of this increase in new members had been to produce a disproportionately large number of associate (non-voting) members. It had also pointed up the need for some clarification of present categories. On the basis of this year's experience, the Committee felt that Article III of the Constitution should be revised and proposed that this be made a major responsibility of next year's Committee. Meanwhile, associate members who are qualified for promotion to full membership should be urged to apply to the Secretary-Treasurer in accordance with the present Constitution.

The Chairman expressed his appreciation of the enthusiasm and effort exhibited by members of the Committee during the past year.

In accordance with the notice of motion given at the last annual meeting and on recommendation of Council, it was moved and seconded that Article III of the Constitution be amended by the addition under section (1) of a new subsection (e) to read as follows:

"(e) Student Affiliate. Application for acceptance as Student Affiliate, sponsored by a Member or Fellow of the Association, may be made at any time to the Secretary-Treasurer by graduate or undergraduate students who are enrolled in a recognized university and who are engaged in the study of psychology." (Carried)

On recommendation of Council, it was moved and seconded that the fee for Student Affiliates be set at \$3.00 per year. (Fee to include a subscription to the Canadian Journal of Psychology.) (Carried)

Accordingly, the scale of fees is now:

Fellows	and	Meml	bers	*******	 \$5.00
Associat	e M	ember	s	*******	 \$4.00
Student	Affi	liates	******	********	 \$3.00

In the general discussion which followed, it was suggested that the C.P.A. should take an active part in stimulating the development of provincial associations in the Maritime and Prairie provinces. It was reported that two preliminary meetings had already been held in the Maritimes and that the organization of an association there was expected to take place this fall.

It was further suggested that some arrangement be worked out with provincial associations under which persons who belong to both the national and provincial associations might pay a single fee at a somewhat reduced rate. It was agreed to refer this proposal to Council for consideration.

(2) Committee on Certification—The report of the Committee on Certification, which had been tabled at an earlier session, was presented by the Chairman, E. S. W. Belyea. It was moved and seconded that the report be accepted.

(Carried)

At the instruction of Council, the secretary then read to the meeting the following communication from the secretary of the Psychological Association of the Province of Quebec:

At the Annual Conference of the Psychological Association of the Province of Quebec the following resolution was passed: 'That the P.A.P.Q. make representation to the C.P.A. at its annual meeting to be held this spring at Winnipeg, to create a national Board of Certification. It is strongly recommended that this Board be created separately, with independent finances, from the C.P.A. but sponsored by it following the example of the A.P.A. and the American Board of Examiners in Professional Psychology.' We would be very glad if this resolution could be put on the proceedings to be considered by the Annual Conference of the C.P.A. this spring.

(Signed) D. B. CLARKE, Secretary.

It was moved by Bois and seconded by Bernhardt that: "The Executive of the Association shall organize, between now and the next Annual Meeting, a Canadian Board of Examiners in Professional Psychology.

This Board shall:

- (a) Comprise five Fellows and/or Members of the Association engaged or interested in the practice of Psychology as a profession;
  - (b) Be independent in its finances and activities from the Association;
- (c) Be committed to report to the Association on its finances and activities at each Annual Meeting:
- (d) Guide itself by the reports submitted to general meetings by the Committees on Certification in 1946, 1947, and 1948, and confer when it deems necessary with the Committees on Certification of the C.P.A. and its affiliated associations."

There was a lengthy discussion of this motion during which it was moved by D. E. Smith and seconded by Belyea that the motion be amended by striking out sub-sections (b), (c), and (d) and substituting the following:

- "(b) Prepare a comprehensive plan for their future action, based upon the reports of the Committees on Certification of 1946, 1947, and 1948;
- (c) Seek the approval of the next Annual Meeting for the plan presented."

After further extended discussion, the Chairman called for a vote on the amendment. The amendment was carried.

- (3) Committee on the Teaching of Psychology—The Chairman, R. B. Liddy, had presented the report of the Committee at an earlier session. It was moved and seconded that the report be accepted. (The report appears elsewhere in this issue.)
- (4) Committee on Publications—The Chairman, K. S. Bernhardt, had tabled the report of this Committee at an earlier session. It was moved and seconded that the following recommendations of the Committee be approved:
  - (a) That the publication arrangements with the University of Toronto Press be continued.
  - (b) That the question of publishing a Monograph Supplement be explored.
  - (c) That the general editorial policy of the JOURNAL be left to the Editor and his Board.
  - (d) That the present policy of accepting material for publication in either French or English, and from members or non-members, be continued.
  - (e) That the C.P.A. proceed with the necessary negotiations for incorporation.
  - (f) That a Committee on Publications, available for consultation with the Editor and the Press, be continued.
  - (g) That the present Editor, J. A. Long, be re-appointed. (Carried)
- (5) Committee on Research Planning—The Chairman, E. A. Bott, had previously tabled the joint report of the Eastern and Western sections of this Committee. The report announced the establishment, by the National Research Council, of an Associate Committee on Applied Psychology.

It was moved and seconded that the following recommendations of the Committee be adopted:

- (a) That the Research Planning Committee be discontinued as of March 31, 1949.
- (b) That Council consider the advisability of establishing a standing committee to review and facilitate psychological research in Canada.
- (c) That Council seek funds to provide for regional meetings in Eastern, Central, and Western Canada to discuss psychological research.
- (d) That a periodic survey be made of research facilities and activities in psychology in Canada.

(e) That an annual listing of all accepted theses for post-graduate degrees in psychology in Canada be published in the CANADIAN JOURNAL OF PSYCHOLOGY. (Carried)

## 5. FURTHER BUSINESS

It was moved and seconded that Council be asked to appoint a new standing committee on "Counselling of University Students" with the following functions:

- (a) To promote the development of counselling services in all Canadian Universities.
- (b) To encourage the exchange of ideas and methods which are found useful.
- (c) To co-ordinate efforts to solve such common problems as the development of vocational materials appropriate for Canada at the university level and the development of Canadian norms for a variety of group tests at the university and professional level.

(Carried)

Members then expressed their appreciation for the fine programme which had been planned by Professor Wright and the excellent arrangements for the meeting which had been made by Professor Williams.

Meeting adjourned.

C. R. Myers, Secretary-Treasurer.

## PROCEEDINGS OF THE ANNUAL MEETING OF THE

## PSYCHOLOGICAL ASSOCIATION OF THE PROVINCE OF QUEBEC

May 1, 1948

The annual conference of the Association met on May 1, 1948, at Sir George Williams College, in Montreal.

The morning session, commencing at 9:45 A.M. was devoted to the presentation of scientific papers. Three sections met simultaneously, and the following papers were presented: Maurice Meunier, "Résultats d'une recherche sur le Binet-Simon; dernière revision Stanford (Forme M) traduite en français"; D. Forgays, "Experiments on the Law Effect": Gaston Gauthier, "Prédiction du succès à l'Ecole du Meuble"; Dr. F. Alexander, "Aspects of Play Therapy"; Br. Blaise Laurier, c.s.v., "Etude comparée des facteurs obtenus par l'application des méthodes d'analyse factorielle de Spearman et de Thurstone aux données experimentales d'une échelle d'appréciation": Mlles. Claire Mathieu, Thérèse Gouin, Gabrielle Brunet, "Hazards of the Abreaction in Child Therapy"; Jean Marie Beauchemin, "Présentation graphique de TAT"; Ronald S. Clarke, "The Physio-Chemical Basis of Behaviour": André Lussier, "Le changement de milieu et l'enfant à caractère neurotique"; Lionel St. Pierre, "The Place of Psychology in the Treatment of Juvenile Delinquency"; Georges Dufresne, "Considérations sur la profession d'avocat dans le Quebec"; B. Hymovitch, "Experiments on the Development of Intelligence"; Gabriel A. Grandbois, "Psychologie du placement"; Dr. Douglas J. Wilson, "Interpreting Psychology to the Public"; Leonard H. Goldman, "The Selection and Use of a Test Battery on Language Handicapped Immigrants-A Practitioner's Views"; Jean Charles Lessard, "Valeur diagnostique du drame spontané"; Dr. D. Spearman, "Psychological Studies for Prefrontal Lobotomy"; Charles E. Gill, "Étude dynamique d'un cas d'homosexualité par le test de Fables de Duss"; F. R. Clarke, "Adults and Vocational Guidance"; Jean-Marc Chevrier, "Psychologie clinique et orientation professionnelle-étude de cas"; Dr. Jacob Tuckman, "The Distribution of Workers in Professional Occupations."

At the general session in the afternoon, four papers were presented: Dr. Robert B. MacLeod, McGill University, gave a paper on "Perceptual Constancy and the Problem of Motivation." Father Noël Mailloux, Université de Montréal, gave a paper on "L'Image du corps et la personnalité." Dr. B. R. Philip, Queen's University, gave a paper on "The Frame of Reference Concept." Mlle. Irene Lézine, Institut National d'Orientation Professionelle de Paris, gave a paper on "Les activités de l'Institut National d'Orientation Professionnelle de Paris."

Following the general session, the annual meeting convened, with the president of the Association, Dr. J. S. A. Bois presiding.

Professor D. B. Clarke, secretary of the Association, indicated in his report that there had been 196 members of the Association in 1947-48, of whom 43 had joined the Association in the current year. Six regular meetings, including the annual meetings had been held throughout the year. and speakers had included Dr. Otto Klineberg, Father N. Mailloux, Dr. L. T. Davhaw Dr. I. S. A. Bois, and Dr. Renatus Hartogs. He further reported that among the activities of the Association and its committees during the winter had been the appointment of a publicity committee under the joint chairmanship of Mr. F. R. Clarke and Mr. J. M. Chevrier, who had been responsible among other things for drawing up a panel of speakers. from the membership, to be available as guest speakers on psychology at meetings of various community associations. He reported that the executive had studied recommendations of a special committee on professional advertising by members, and that the executive recommended that no action be taken in this matter until the question of certification had been settled. Further consideration had been given to the question of affiliation with the Conference of State Psychological Associations with respect to certification. The report was approved on motion by Mr. Paget, seconded by Father Mailloux.

Brother Blaise Laurier, the treasurer, reported a balance of \$193.56 for the close of the Association year 1947-48. The report was approved on motion by Prof. Vinette, seconded by Dr. Norris,

Dr. Frances Alexander presented the report of the Committee on Certification and Training, of which she had been co-chairman in the latter half of the year. She reported that the Committee had continued to study the problem of certification in psychology and had recommendations to bring before the meeting later in the form of a motion. The Committee felt that certification should be discussed as a question separate from membership in an organization such as the P.A.P.Q. The report was approved on motion by Dr. Alexander, seconded by Father Mailloux.

Dr. MacLeod reported that the Research Committee had been completely inactive again this year. The functions of the Research Committee were briefly discussed by the meeting. It was the consensus of opinion that a chairman for this committee should continue to be elected to the executive of the Association as a sort of "minister-without-portfolio," but that no members of the committee be elected. It was decided to allow the committee to lie dormant until its functions could be more practically defined.

Dr. Tuckman, reporting for the Publications Committee, stated that the proceedings of the P.A.P.Q., and articles by its members have appeared in the Journal of the C.P.A. He asked members to contribute more actively to the Journal.

In the absence of Dr. Webster, chairman of the Clinical Section, Dr. Bois read the report, indicating that three meetings of the section had been held, and that the section had accepted the responsibility for the programme

of one of the general meetings of the Association. Difficulties had been encountered, during the year, in finding satisfactory nights on which the senior members of the Association, of whom the section was chiefly composed, were all free. The report was approved on motion by Fr. Laurier, seconded by Dr. MacLeod.

Mrs. Sofin, secretary of the Vocational Guidance Section, reported that meetings of her section had been limited this year to small numbers actively engaged in guidance. The School Counsellors had been invited to join the section, but few participated. The Committee had prepared seventeen of a projected series of twenty-four occupational outlines which had been published in the Saturday editions of the Montreal Daily Star on the "Design for Living" page. This section had also planned radio round-table discussion on guidance. It had discussed the problem of certification. It was felt that, in the certification of guidance personnel, qualifications and requirements in terms of courses should be differentiated from those of psychologists in general. A tentative list of such qualifications and course requirements has been drawn up by the membership to be approved by the Committee on Training and Certification of the P.A.P.Q. The report was approved on motion by Mr. Macfarlane, seconded by Dr. Tuckman.

Mr. F. R. Clarke presented the report of the Publicity Committee. He indicated that the aims of the Committee were twofold: to educate the public to the fact that there is a body of information to help them in their problems of living, and to inform them of the existence of capable counsellors in their community; to help create a body of public opinion favourable to the advancement of psychology as a profession and a science. He indicated that we had excellent press support, and he congratulated Dr. Douglas Wilson on the "Design for Living" page appearing weekly in the Montreal Daily Star. He also reported that the panel of speakers drafted by the committee had presented seventy-eight addresses through the year. The report was approved on motion by Mr. Clarke, seconded by Dr. Norris.

In response to a suggestion made by the editor of the Canadian Journal of Psychology, it was moved by Father Mailloux, seconded by Dr. Tuckman that the P.A.P.Q. appoint a French-speaking consulting editor to this Journal. It was moved by Dr. Alexander, seconded by Mrs. Sofin, that the editor of the Journal be asked to have printed short French summaries of articles written in English, and short English summaries of articles written in French, and that this task be considered part of the functions of the French-speaking Consulting Editor. It was felt that this step would make the Journal more international in scope.

There was some discussion of the extra fees that might be involved in affiliation with the Conference of State Psychological Associations. It was moved by Dr. MacLeod, seconded by Dr. Wilson that we do not proceed further with such affiliation until the matter has been clarified, and that the secretary be instructed to write to the President of the Conference of State

Psychological Associations to obtain further clarification as to obligations and advantages ensuing from such affiliation.

It was moved by Dr. Malmo, seconded by Father Mailloux that the P.A.P.Q. make representations to the C.P.A. at its Annual Meeting to be held this spring in Winnipeg, to create a national Board of Certification. It is strongly recommended that this Board be created separately, with independent finances, from the C.P.A., but sponsored by it following the example of the A.P.A. and the American Board of Examiners in Professional Psychology.

On motion by Dr. Malmo, seconded by Dr. Tuckman, Article III, section I of the P.A.P.Q. constitution was amended to read—"Full members shall be persons whose application for membership is approved by the executive. They shall be persons who are actively engaged in the field of psychology and (1) who hold a graduate degree in psychology or (2) who through training and experience have such other qualifications as may be approved by the executive.

On motion by Br. Laurier, seconded by Professor Vinette, Article V, Section 2 of the P.A.P.Q. constitution was amended to read—"A member who has not paid the current annual fee shall be dropped from membership at the forthcoming annual meeting, but may be reinstated in good standing if he pays fees in arrears, provided he is not in arrears for more than one year. A member who has not paid the annual subscription fee for two or more consecutive years shall be dropped from membership, and may be reinstated only upon new applications for membership to the Committee on Training and Certification."

It was moved by Br. Laurier, seconded by Dr. Norris, that the P.A.P.Q. again offer prizes to outstanding students in Psychology at McGill University, the University of Montreal, and at Sir George Williams College.

The following were elected to office for the year 1948-49: Dr. Robert B. Malmo, President; Br. Blaise Laurier, Vice-President; Prof. Douglass Burns Clarke, Secretary; Mr. Jean-Marc Chevrier, Associate Secretary; Mrs. Rosalie Sofin, Treasurer; Dr. Frances Alexander, Chairman of Committee on Training and Certification; Dr. D. O. Hebb, Chairman of Committee on Research; Dr. J. Tuckman, Chairman of Committee on Publications; Mr. J. A. Aurèle Gagnon, Dr. E. C. Webster, Mr. Jean-Marc Chevrier, Dr. D. J. Wilson, Dr. Gilles Y. Moreau, Dr. H. E. Lehmann, Dr. J. Tuckman, Mr. Gaston Gauthier, members of the Committee on Training and Certification. It was estimated that 120 members and guests attended the Annual Conference.

The Conference concluded with the annual dinner held at the Windsor Station Restaurant at 7:45 P.M. The outgoing president, Dr. J. S. A. Bois gave the address. His topic was "The Psychologist as a Counsellor."

DOUGLASS BURNS CLARKE.

Secretary.

## CONSTITUTION OF THE CANADIAN PSYCHOLOGICAL ASSOCIATION

(as amended up to June, 1948)

## ARTICLE I

 There is hereby established a society, to be known as the "Canadian Psychological Association" (hereinafter referred to as "the Association").

## ARTICLE II Object

- 1. The object for which the Association is established is to promote, by teaching, discussion, and research, the advancement and practical application of psychological studies in Canada.
- 2. In pursuance of this object, the Association shall:
  - (a) Receive, hold and use all money and other property subscribed or in any other manner acquired;
  - (b) Hold meetings at the times and in the manner hereinafter described.
- 3. It may also:
  - (a) Issue such publications as may from time to time be considered feasible;
  - (b) Render such assistance as it properly can to governments and other organizations concerned with Education, Health, Administration of Justice, Industry, National Defence, and other social and national problems;
  - (c) Include any other activities that may be considered to forward the objects of the Association.

## ARTICLE III Membership

- 1. Membership in the Association shall consist of the following classes:
  - (a) Fellows. Fellows may be nominated by the Council and elected at each annual meeting of the Association. Such nominations shall be made by a unanimous decision of the Conucil. (It is understood that election to fellowship is a distinct honour, and only a small number shall be nominated.)
  - (b) Members. Members may be elected at each Annual Meeting of the Association. Application for membership may be made to the Secretary-Treasurer by an Associate Member before April 15th any year. Qualifications for membership shall be: (1) Associate membership in the Association for at least one year, and (2) the possession of a post-graduate degree based in part on psychological study. Applications for membership shall be considered by the

Council and election to membership can occur only on the nomination of the Council. All members of the Association in good standing on May 28th, 1945 shall be continued in full membership.

- (c) Associate Members. Application for associate membership, sponsored by a member or fellow of the Association may be made at any time to the Secretary-Treasurer of the Association by persons who hold a University degree based in part on psychological study or who are actively interested in psychology as a science or profession. Such applications shall be examined and dealt with by the Executive of the Association in October, January, and May of each year.
- (d) Honorary Life Members. Fellows and Members of the Association on their retirement, may, on recommendation of Council, be continued as Fellows or Members without payment of fees and be known as "Honorary Life Fellows" or "Honorary Life Members."
- (e) Student Affiliates. Application for acceptance as Student Affiliate, sponsored by a Member or Fellow of the Association, may be made at any time to the Secretary-Treasurer by graduate or undergraduate students who are enrolled in a recognized university and who are engaged in the study of psychology.
- Only Fellows and Members shall be eligible to vote or hold office in the Association.
- Persons who have not paid their fees for two consecutive years shall be deemed to have resigned.

#### ARTICLE IV

## Officers

- The officers of the Association shall comprise the Honorary President, the President, the Past President, the President Elect, the Secretary-Treasurer, and six Directors. These shall constitute the Council. In the event of the absence or incapacity of the President, the remaining members of the Council shall elect a President pro tem. The President of an Affiliated Society or his delegated representative shall be ex-officio a member of the Council.
- 2. The duty of the Council shall be to forward the objectives of the Association, and when necessary to act on its behalf; to arrange for the nomination and election of officers, fellows and members; and to make recommendations concerning policies. The Council shall meet at least once a year and shall report its activities to the Association as a whole, preferably at the annual meeting.
- 3. The President, Past President, President Elect, and Secretary- Treasurer shall be the *Executive* of the Association.
- 4. The President, President Elect, and Secretary-Treasurer shall be elected annually. Two Directors shall retire each year and two new Directors

shall be elected each year for a term of three years. (It is understood that as far as possible the Directors shall be representative of the whole of Canada.)

The Honorary President shall be elected annually by the Council of the Association.

## ARTICLE V

### Fees

- The annual membership fees for all classes of members shall be determined from time to time in accordance with Association needs, on recommendation of Council, by mail vote of the fellows and members of the Association.
- The annual membership fee shall include subscription to the JOURNAL of the Association.

## ARTICLE VI

## Meetings

An Annual Meeting of the Association shall be held on a date and at a
place recommended by the Council and approved by a majority of the
Fellows and Members of the Association present at the previous Annual
Meeting.

## ARTICLE VII

### Committees

- A special Committee shall be appointed by the Council to make the arrangements necessary for the Annual Meeting. At least one member of this committee shall be resident at the centre at which the meeting is to be held.
- 2. A Programme Committee shall be appointed by the Council to arrange a programme of papers and discussions at the Annual Meeting.
- Standing and Temporary Committees may be appointed by the Council
  as circumstances require. Such Committees shall report on their activities at the Annual Meeting of the Association.

## ARTICLE VIII

#### Amendments

1. Any Fellow or Member of the Association may propose an amendment to the Constitution by sending to the Secretary-Treasurer a Notice of Motion in writing at least two months before the Annual Meeting at which the amendment is to be made. This Notice of Motion must be signed by the mover and the seconder, both of whom must be Members or Fellows of the Association. Such notice of motion must be published in the JOURNAL or circulated by mail to the membership at least one month before the Annual Meeting. The amendment shall be adopted or rejected by a majority of the Members and Fellows present at the meeting.

### ARTICLE IX

## Regional Societies

Regional Psychological Societies may apply for affiliation with the Association. Such applications shall be made to the Secretary-Treasurer and considered by the Council. The Council shall recommend to the Annual Meeting of the Association the action to be taken, but applications shall be accepted or rejected by a majority vote at the Annual Meeting.

### By-Law I

- The Council of the Association shall organize a BOARD OF CERTIFICA-TION. This Board shall be empowered to:
  - (a) Establish standards for certification as a psychologist.
  - (b) Examine qualifications of applicants for certification.
  - (c) Issue and cancel certificates of qualification as a psychologist.
  - (d) Elect a Registrar who shall keep the records of certification.
  - (e) Charge a fee for such certification.

## CANADIAN PSYCHOLOGICAL ASSOCIATION

1948-1949

#### COUNCIL

Honorary President, R. B. LIDDY (London)

#### EXECUTIVE

President, J. S. A. Bois (Montreal)
Past President, S. N. F. Chant (Vancouver)
President Elect, C. R. Myers (Toronto)
Secretary-Treasurer, G. H. Turner (London)

#### DIRECTORS

J. D. KETCHUM (Toronto)

E. C. Webster (Montreal)

D. E. Smith (Edmonton)

MARY L. NORTHWAY (Toronto)

N. W. MORTON (Ottawa)

W. E. BLATZ (Toronto)

### EX OFFICIO MEMBERS OF COUNCIL

R. B. Malmo, President, Psychological Association of the Province of Quebec W. G. Black.

President, British Columbia Psychological Association

LEOLA E. NEAL, President, Ontario Psychological Association

## CANADIAN JOURNAL OF PSYCHOLOGY

THE JOURNAL OF THE CANADIAN PSYCHOLOGICAL ASSOCIATION

Editor: JOHN A. LONG

Assistant Editor: KATHLEEN M. HOBDAY

Consulting Editors:

E. S. W. BELYEA (British Columbia); J. TUCKMAN, R. VINETTE (Quebec); G. H. TURNER (Ontario); W. H. D. VERNON (Maritimes); D. C. WILLIAMS (Prairie Provinces)

#### MEMBERSHIP COMMITTEE

D. C. WILLIAMS, Winnipeg (Chairman)
(With power to add)

#### RESEARCH PLANNING COMMITTEE

#### EASTERN SECTION

E. A. BOTT, Toronto (Chairman)

D. O. Hebb, Montreal (Treasurer)

K. S. Bernhardt, Toronto (Secretary)

J. D. Ketchum, Toronto

R. B. Liddy, London

W. Line, Toronto

N. Mailloux, Montreal

N. W. Morton, Ottawa

C. R. MYERS, Toronto

#### WESTERN SECTION

- S. N. F. CHANT, Vancouver (Chairman) D. E. SMITH, Edmonton J. E. Morsh, Vancouver (Secretary) T. W. COOK, Saskatoon

### D. C. WILLIAMS, Winnipeg

## COMMITTEE ON THE TEACHING OF PSYCHOLOGY

R. H. SHEVENELL, Ottawa (Chairman) B. R. PHILIP, Kingston I. E. Morsh, Vancouver L. T. DAYHAW, Ottawa D. C. WILLIAMS, Winnipeg B. LAURIER, Montreal MARY J. WRIGHT, London G. A. FERGUSON, Montreal MARY D. SALTER, Toronto Louise M. Thompson, Fredericton

#### COMMITTEE ON PUBLICATIONS

K. S. BERNHARDT, Toronto (Chairman) KATHLEEN M. HOBDAY, Toronto (Secretary) C. R. Myers, Toronto W. R. WEES, Toronto

### COMMITTEE ON THE COUNSELLING OF UNIVERSITY STUDENTS

W. H. D. VERNON, Wolfville (Chairman) (With power to add)

## C.P.A. REPRESENTATIVE ON THE CANADIAN SOCIAL SCIENCE RESEARCH COUNCIL

R. B. LIDDY, London

## CANADIAN PSYCHOLOGICAL ASSOCIATION MEMBERSHIP LIST

#### SEPTEMBER, 1948

(S)\* Abbott, William Edward, 130 Waterloo St., Winnipeg, Man.
 (A) Abraham, Nelson William, B.A. (Agra) 1938, M.A. (Nagpue) 1942.
 89 Charles St. W., Toronto, Ont.

Ajello, Peter Arnott, B.A. (British Columbia) 1946. Junior Psychologist, Shaughnessy Military Hospital; 1157 Marine Drive, West Vancouver, B.C. (A) (M)

Aldridge, Gordon J., B.A. (Toronto) 1938, Dip. Soc. Sci. (ibid.) 1939. Big Brother Movement, 504 Jarvis St., Toronto, Ont. Alexander, Frances S., B.A. (Smith) 1929, M.A. (Columbia) 1931, Ph.D. (M) (ibid.) 1935. Consulting Psychologist, 708 Grosvenor Ave., Montreal, Que. Allen, Mary Graham (Mrs. Peter), B.A. (Toronto) 1943, M.A. (ibid.) 1945. (A)

c/o 106 Warren Rd., Toronto, Ont.

Archer, George James (Inspector), Senior Personnel Officer, Royal Canadian Mounted Police, Ottawa, Ont.

Arnold, Magda Blondien, B.A. (Toronto) 1939, M.A. (ibid.) 1940, Ph.D. (A)

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